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This specially designed tractor is used to dig the trench for the installation of natural gas pipelines.

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Gas Supplies of Interstate Natural Gas Pipeline Companies 1988

Energy Information Administration
Office of Oil and Gas
U. S. Department of Energy
Washington, D.C. 20585

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Introduction

Gas Supplies of Interstate Natural Gas Pipeline Companies 1988 was prepared by the Reserves and Natural Gas Division, Office of Oil and Gas, Energy Information Administration (EIA). The publication provides information on the total reserves, production, and deliverability capabilities of the 79 interstate pipeline companies[1] required to file the Federal Energy Regulatory Commission (FERC) Form 15, "Interstate Pipeline's Annual Report of Gas Supply." This publication is the 26th in a series of annual reports on the total gas supplies of interstate pipeline companies since the inception of individual company reports to the Federal Power Commission (FPC) in 1964 for report year 1963.

This publication provides information on the interstate pipeline companies' supply of natural gas during calendar year 1988, for use by the FERC for regulatory purposes. It also provides information to other Government agencies, the natural gas industry, as well as policy makers, analysts, and consumers interested in current levels of interstate supplies of natural gas and trends over recent years.

The gas supplies of interstate pipeline companies consist of the certificated, dedicated, recoverable, salable natural gas available from domestic in-the-ground reserves; gas purchased under contracts with other interstate pipeline companies; domestically produced coal gas, liquefied natural gas (LNG), and synthetic natural gas (SNG); and imported natural gas and LNG. The domestic in-the-ground reserves consist of company-owned reserves including natural gas in underground storage, reserves dedicated to or warranted under contracts with independent producers, and supplemental or short-term supplies purchased from independent producers and intrastate pipeline companies. To avoid duplicate reporting of domestic in-the-ground reserves, the volumes of gas under contract agreement between jurisdictional pipelines have been excluded in summarizing State and national reserves. Volumes contracted under agreements with foreign suppliers include pipeline imports from Canada and Mexico.

On October 1, 1977, pursuant to provisions of the Department of Energy Organization Act, Public Law 95-91, 91 stat. 565 (August 4, 1977), and Executive Order No. 12009, 42 Fed. Reg. 46267 (September 15, 1977), the FPC ceased to exist, and its functions and regulatory responsibilities were transferred to the FERC, an independent commission within the Department of Energy (DOE). The EIA within DOE is responsible for collecting, compiling, and disseminating the gas supply information reported by the jurisdictional interstate pipeline companies on Form 15. A summary of the methods used for collecting, analyzing, and preparing the data is provided in Appendix A.

All volumes of natural gas in this publication are reported on a dry basis at 14.73 pounds per square inch absolute and 60 degrees Fahrenheit. A glossary of terms used in this report has been provided to assist users in understanding the data presented in the publication. Additional natural gas information sources are listed in Appendix D.

[1]Appendix B lists all interstate pipeline companies that were required to file 1988 gas supply information with the Federal Energy Regulatory Commission.

Overview

Domestic Natural Gas Reserves

Total dedicated domestic gas reserves, owned by or under contract to the interstate pipeline companies, decreased in 1988 by 16.3 trillion cubic feet, or 25.1 percent, from 65.1 trillion cubic feet at the beginning of the year to 48.8 trillion cubic feet at the end of the year (Table 1). The reader should be aware that the decrease in reserves, reported by Form 15 respondents, does not necessarily indicate a decrease in the level of proved natural gas reserves for the United States as a whole. The decrease reported on FERC 15 indicates that many of the respondents are not entering into long-term contracts. Instead, they are reviewing existing gas purchase contracts to ensure that they reflect more accurate estimates of operating requirements. As a result of the review, they have released gas in an effort to settle take or pay commitments.

The 25.1 percent drop in dedicated reserves reflects a trend by some interstate pipeline companies to become transporters of natural gas. This reflects a basic shift in the structure of the natural gas industry. In past years, gas was traditionally sold by the producer to the pipeline company that sold it to a local distribution company which in turn delivered it to the ultimate consumer. Currently, the trend is increasingly for gas to be sold by the producer directly to the consumer (or to a local distribution company), resulting in less gas being dedicated to the interstate market. Pipeline companies in these cases provide transportation services only.

The EIA collects total proved domestic reserve information on Form EIA-23, "Annual Report of Domestic Oil and Gas Reserves," and publishes its findings annually in *U. S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, DOE/EIA-0216. Natural gas reserves in the Lower 48 States grew by 3 percent to 158.9 trillion cubic feet. However, total U.S. reserves declined to 168.0 trillion cubic feet due to a large downward revision in Alaskan North Slope reserves.

A 5-year tabulation shows that dedicated domestic gas reserves, reported on Form 15, decreased from 94.5 trillion cubic feet at the beginning of 1984 to 48.8 trillion cubic feet at the end of 1988, a decrease of 45.7 trillion cubic feet, or 48.4 percent (Table 2). The reported peak reserves of 198.1 trillion cubic feet occurred at year-end 1967 (Table 3). It should be noted, however, that reserves reported for 1981 and subsequent years include company-owned reserves in underground storage. Prior to report year 1981, underground storage reserves were not uniformly reported.

Annual Production

Total gas purchased and produced from the dedicated domestic gas reserves in 1988 was 5.8 trillion cubic feet, down 13.4 percent from the 6.7 trillion cubic feet reported in the preceding year. A peak production level of 14.2 trillion cubic feet occurred in 1971 and 1972 (Table 3).

Reserves/Production (R/P) Ratio

The 1988 ratio of total dedicated domestic reserves to production was 8.4, slightly below the 9.8 ratio reported for 1987 (Figure 1). The R/P ratio declined steadily throughout the first 10 years of Form 15 reports. Since 1972, the decline has been less pronounced. The R/P ratio dropped to a low of 8.6 in 1984, and then increased to 10.6 in 1986 due to the decrease in production during 1986.

Net Revisions

Net revisions to dedicated domestic gas reserves during 1988 were -12.8 trillion cubic feet, as compared to -10.7

trillion cubic feet in 1987 (Tables 1 and 2). Revisions are attributed to production adjustments, changes in dedicated interests, and revisions to in-the-ground domestic reserve estimates of previous years made during the current report year. Revisions to purchases from interstate pipeline companies that are survey respondents, revisions to import contracts, or revisions to purchases of coal gas, LNG, or SNG are not included.

Reserve Additions

Total interstate reserve additions during 1988 are reported to be 2.2 trillion cubic feet, compared to additions of 1.9 trillion cubic feet in 1987 (Tables 1 and 2). The increase in reserve additions during 1988 reverses a trend of decreases since 1985.

Reserve additions consist of new, proved, dedicated domestic reserves credited to new fields, new reservoirs, new gas purchase contracts, amendments to old gas purchase contracts, or purchase of in-place gas reserves that occurred during the report year and had not been previously reported. Reserve additions refer to domestic in-the-ground natural gas reserve additions and do not refer to interstate pipeline purchase agreements, contracts with foreign suppliers, or coal gas, LNG, or SNG purchase arrangements.

Of the 2.2 trillion cubic feet of reserve additions reported during the report year, 1.2 trillion cubic feet are attributed to new gas purchase contracts with independent producers (Table 5).

Gross Change in Reserves

The gross change in dedicated domestic reserves is calculated at -10.5 trillion cubic feet for 1988 (Table 1). This quantity is defined as year-end 1988 reserves plus 1988 production minus year-end 1987 reserves.

Gross Change/Production (GC/P) Ratio

The ratio of gross change in reserves (revisions and additions) to production for 1988 was -1.8. The comparable ratio for 1987 was -1.3. A ratio less than 1 indicates a decrease in year-end reserves from the preceding year.

Imports

Total natural gas imported by interstate pipeline companies from Canada was 0.9 trillion cubic feet, 12.9 percent of the total gas produced and purchased in 1988. Volume of Canadian and Mexican natural gas remaining under contract is 10.0 trillion cubic feet. (Figure 2 and Table 4).

Projected Deliverability

Total deliveries are projected to decline from 7.8 trillion cubic feet in 1989 to 3.7 trillion cubic feet by 1993 (Table 4). This decline is driven by the projected decline in domestic reserve deliverability. Deliveries from foreign and other sources are expected to decline, but at a slower rate over the 5-year period.

Table 1. Summary of Domestic Natural Gas Reserves of the Interstate Natural Gas Pipeline Companies
(Million Cubic Feet)

Item	Company-Owned and Long-Term Gas Purchase Contracts	Other Gas Supply[a]	Total Dedicated Domestic Gas Reserves
(a) Total dedicated gas reserves as of December 31, 1987	64,502,924	[b] 632,212	65,135,136
(b) Net revisions to reserve estimates during 1988[a]	NA	NA	-12,752,381
(c) Reserves added during 1988	NA	NA	2,212,959
(d) Total net revisions and additions[c] (e) minus (a)	-10,899,644	360,222	-10,539,422
(e) Gas reserves as of December 31, 1988 and changes during 1988 (f) plus (g)	53,603,280	992,434	54,595,714
(f) Gas purchased and produced during 1988	5,349,315	454,840	5,804,155
(g) Total dedicated gas reserves as of December 31, 1988	48,253,965	537,594	48,791,559

[a] Includes emergency purchases, short-term contracts, and intrastate purchases. Purchases between interstate pipelines, and purchases from foreign suppliers are excluded.
[b] Represents contractual volumes.
[c] Includes underground storage reserves.
NA = Not Available.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 2. Annual Changes in Interstate Gas Reserves
(Billion Cubic Feet)

Item	1984	1985	1986	1987	1988
Beginning of Year Reserves	94,497	89,894	85,102	80,602	65,135
New Reserve Additions	4,788	5,089	2,489	1,934	2,213
Net Revisions[a]	1,030	-963	589	-10,745	-12,752
Total Additions and Revisions[b]	5,818	4,126	3,078	-8,811	-10,539
Annual Production	10,422	8,918	7,578	6,655	5,804
Year-End Reserves	89,894	85,102	80,602	65,135	48,792
Upward (Downward) Revisions Percent of Additions	21.5	-18.9	23.7	-555.6	-576.2

[a] Calculated; includes underground storage reserves.
[b] "Year-End Reserves" plus "Annual Production" less "Beginning of Year Reserves."
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

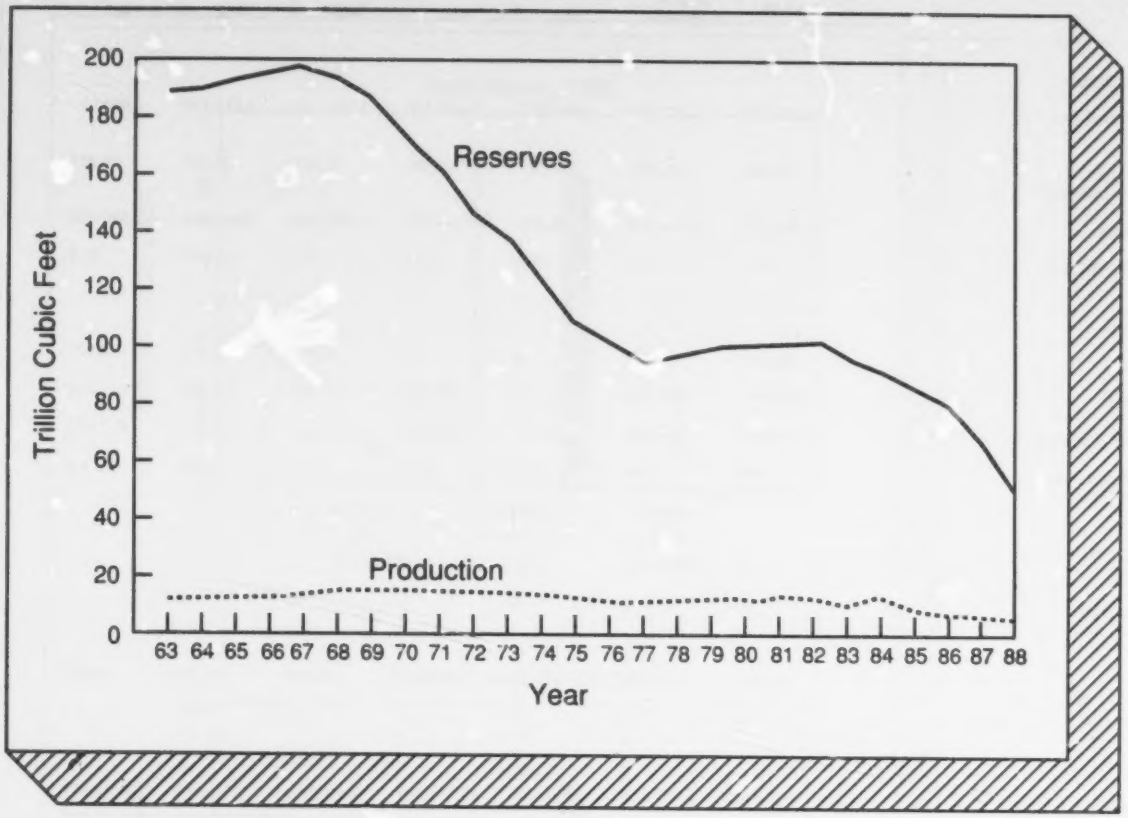
Table 3. Total Interstate Gas Supply, Domestic Gas Reserves, Import Contracts, and Other Supply

(Trillion Cubic Feet)

Date	Domestic Reserves				Import contracts		Other[b]	Total Gas Supply	Number of Companies
	Short-Term and Emergency Purchases[a]	Long-Term Independent Producer Contracts	Company Owned	Total	Pipeline	LNG			
Gas Supply at Year-End									
1963	—	165.1	23.4	188.5	9.7	—	—	198.2	65
1964	—	166.3	22.9	189.2	11.0	—	—	200.2	67
1965	—	169.1	23.0	192.1	10.8	—	—	202.9	66
1966	—	172.9	22.2	195.1	9.9	—	—	205.0	69
1967	—	175.9	22.2	198.1	10.6	—	—	208.7	67
1968	—	173.3	21.7	195.0	12.5	—	—	207.5	67
1969	—	169.0	18.6	187.6	11.9	—	—	199.5	68
1970	—	156.4	17.2	173.6	17.2	—	—	190.8	68
1971	0.07	144.8	16.5	161.4	16.6	—	—	178.0	62
1972	.32	131.2	15.4	146.9	15.7	5.7	—	168.3	67
1973	.21	120.9	13.2	134.3	14.8	8.7	—	157.8	67
1974	.06	108.6	11.8	120.5	13.5	9.1	—	143.1	65
1975	.01	95.6	11.2	106.8	12.6	9.4	—	128.8	65
1976	.03	87.5	10.8	98.3	11.5	9.4	—	119.2	62
1977	.01	82.6	10.3	92.9	10.7	12.6	—	116.2	61
1978	[c] (*)	83.7	10.3	94.0	10.1	12.4	—	116.5	61
1979	.02	84.7	12.6	97.3	10.4	12.0	—	119.6	63
1980	.27	84.5	12.3	97.1	11.3	8.3	—	116.7	63
1981	1.02	83.6	13.7	98.3	12.3	7.6	0.34	118.6	73
1982	.66	84.4	13.7	98.7	11.0	3.3	.61	113.6	71
1983	.55	83.4	10.6	94.5	9.5	3.2	.55	107.7	71
1984	.48	79.9	9.5	89.9	10.7	3.2	.85	104.6	74
1985	.43	75.4	9.3	85.1	10.7	3.2	.57	99.6	76
1986	.65	73.4	6.6	80.6	11.4	3.2	.64	96.0	77
1987	.63	58.3	6.2	65.1	10.2	—	.87	76.2	72
1988	.54	42.2	6.1	48.8	10.0	—	.75	59.6	68
Annual Production									
1963	—	8.5	.9	9.4	.4	—	—	9.8	65
1964	—	9.1	.9	10.0	.4	—	—	10.4	67
1965	—	9.4	1.0	10.4	.4	—	—	10.8	66
1966	—	10.1	1.0	11.1	.4	—	—	11.5	69
1967	—	10.8	1.0	11.8	.5	—	—	12.3	67
1968	—	11.6	1.0	12.6	.6	—	—	13.2	67
1969	—	12.4	1.0	13.4	.7	—	—	14.1	68
1970	—	13.1	1.0	14.1	.8	—	—	14.9	68
1971	.18	13.1	.9	14.2	.9	—	—	15.1	62
1972	.27	12.9	1.0	14.2	1.0	—	—	15.2	67
1973	.29	12.6	.8	13.7	1.0	—	—	14.7	67
1974	.23	12.0	.8	13.0	.9	—	—	13.9	65
1975	.11	11.2	.7	12.0	.9	—	—	12.9	65
1976	.08	10.7	.7	11.4	.9	—	—	12.3	62
1977	.16	10.0	.9	10.9	1.0	.1	—	12.1	61
1978	.10	10.3	.6	11.0	.8	.6	—	12.4	61
1979	.05	10.8	.7	11.6	1.0	.2	—	12.7	63
1980	.03	10.9	.7	11.6	.9	.1	—	12.6	63
1981	.40	10.9	.6	12.0	.8	[d] (*)	.02	12.8	73
1982	.13	10.2	.6	10.9	.9	[d] (*)	.02	11.8	71
1983	.10	9.0	.4	9.5	.8	.1	.01	10.4	71
1984	.17	9.9	.4	10.4	.8	[d] (*)	.01	11.2	74
1985	.23	8.4	.3	8.9	.9	[d] (*)	.05	9.9	76
1986	.25	7.1	.2	7.6	.7	—	.09	8.3	77
1987	.45	6.0	.2	6.7	.8	—	.10	7.5	72
1988	.45	5.2	.2	5.8	.9	—	.20	6.9	68

[a] Includes intrastate pipeline purchases.
[b] Includes COG, LNG, SNG, and other supply.
[c] Less than 0.005 trillion cubic feet.
[d] Less than 0.05 trillion cubic feet.
— = Not Applicable.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Figure 1. Natural Gas Reserves and Production
(Trillion Cubic Feet)



Source: Energy Information Administration, Form FERC-15, "Interstate Pipeline's Annual Report of Gas Supply."

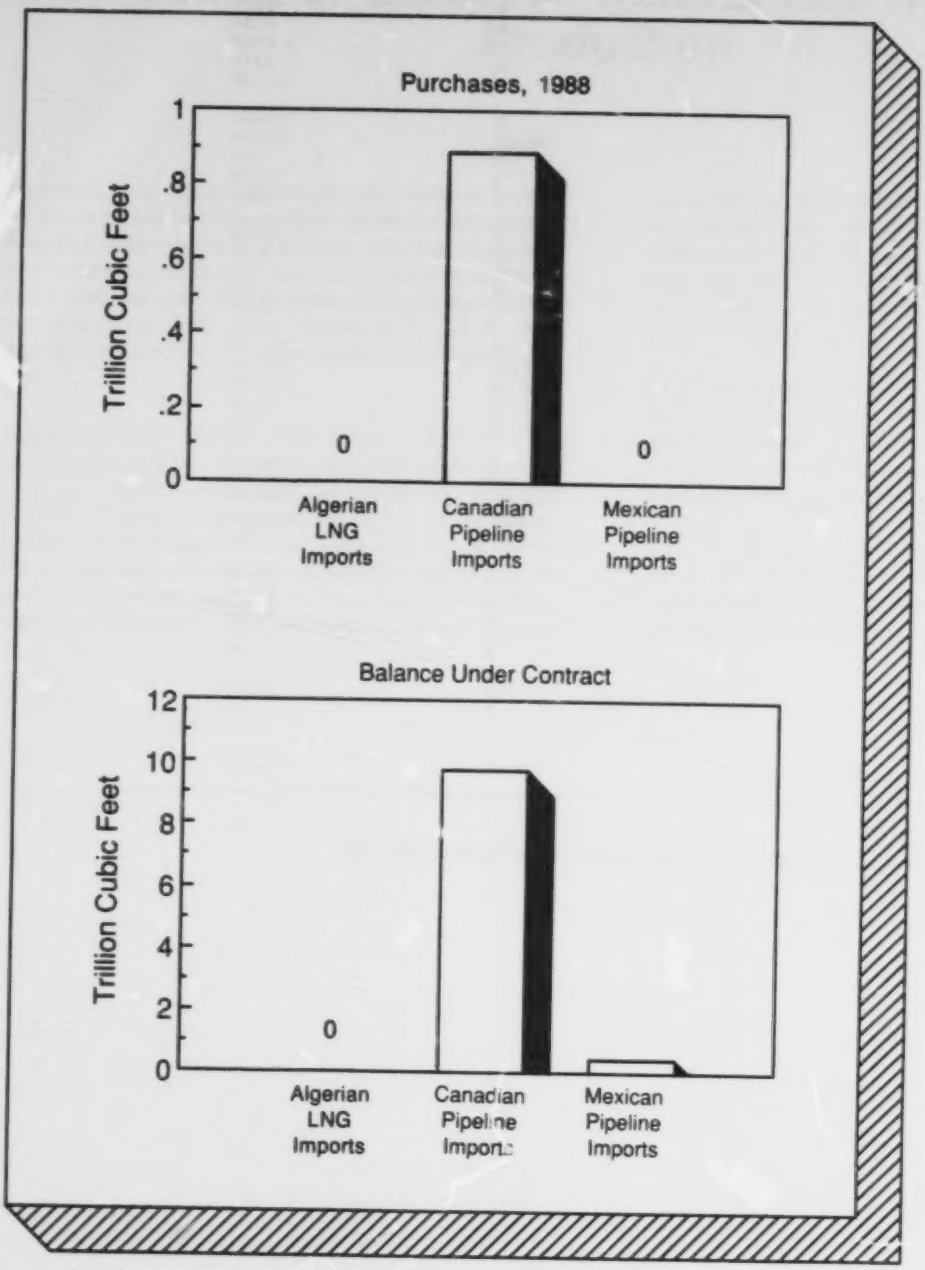
Table 4. Gas Supply and Deliverability Summary: Volumes Dedicated to Interstate Pipeline Companies as of Year-End 1988

(Million Cubic Feet)

	Gas Supply 12-31-88	Produced and/or Purchased	Projected Deliverability				
			1989	1990	1991	1992	1993
Domestic Gas Supply							
Company-Owned and Long-Term	48,253,965	5,349,315	6,461,027	5,413,120	4,364,432	3,619,790	2,960,079
Short-Term and Emergency Purchases[a]	537,594	454,840	257,667	44,255	35,607	32,824	30,381
Total Domestic	48,791,559	5,804,155	6,718,694	5,457,375	4,400,039	3,652,614	2,990,460
Domestic as Percent of Total	81.9	84.1	86.4	84.7	83.3	82.2	80.5
Pipeline Imports							
Mexican Gas	352,922	0	0	0	3,614	3,614	3,623
Canadian Gas	9,663,723	889,832	943,116	898,065	813,479	734,930	674,207
Total Pipeline Imports	10,016,645	889,832	943,116	898,065	817,093	738,544	677,830
Pipeline Imports as Percent of Total	16.8	12.9	12.1	13.9	15.5	16.6	18.2
LNG Imports							
Algerian LNG	0	0	0	0	0	0	0
LNG Imports as Percent of Total	.0	.0	.0	.0	.0	.0	.0
Other[b]	752,437	204,351	117,406	87,940	65,268	54,098	46,635
Other as Percent of Total	1.3	3.0	1.5	1.4	1.2	1.2	1.3
Total All Sources	59,560,641	6,898,338	7,779,216	6,443,380	5,282,400	4,445,256	3,714,925

[a] Includes intrastate pipeline purchases.
[b] Includes coal gasification, liquefied natural gas, synthetic natural gas, and other supply.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Figure 2. Imports
(Trillion Cubic Feet)



Source: Energy Information Administration, Form FERC-15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 5. New Reserve Additions Reported for the First Time in 1988
(Million Cubic Feet)

Company Name	Producer-Contracted Additions	Total Additions
ANR Pipeline Co	0	15,611
Arkansas Oklahoma Gas Corp	0	4,334
Arkla Inc	0	215,930
Carnegie Natural Gas Co	0	3,876
CNG Transmission Corp[1]	0	27,195
Colorado Interstate Gas Co	0	26,327
Columbia Gas Transmission Corp	100,435	105,574
El Paso Natural Gas Co	0	137
Florida Gas Transmission Co	0	70,408
International Paper Co	0	2,500
K N Energy Inc	0	70,429
Kentucky West Va Gas Co	0	6,750
Lone Star Gas Co Div Enserch Corp	0	1
Mid Louisiana Gas Co	0	3,786
MIGC Inc	0	1,431
Mississippi River Transmission Corp	0	314,760
Natural Gas Pipeline Co of America	159,787	181,747
Northern Natural Div InterNorth Inc	48,719	187,687
Panhandle Eastern Pipe Line Co	0	15,540
Questar Pipeline Company[2]	0	1,210
Sea Robin Pipeline Co	0	5,393
Southern Natural Gas Co	14,504	51,553
Tennessee Gas Pipeline Div Tenneco	195,435	196,887
Texas Eastern Transmission Corp	465,885	512,894
Texas Gas Pipeline Corp	7,397	7,397
Texas Gas Transmission Corp	0	20,197
Transwestern Pipeline Co	0	52,741
Trunkline Gas Co	0	67,073
United Gas Pipe Line Co	0	6,677
Valero Interstate Transmission Co	0	960
Williams Natural Gas Co	0	13,290
Williston Basin Interstate Pipeline	0	425
Total All Companies	992,162	2,212,920

[1] Formerly Consolidated Gas Transmission Corp.
[2] Formerly Mountain Fuel Resources Inc.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Distribution of Domestic Natural Gas Reserves and Production

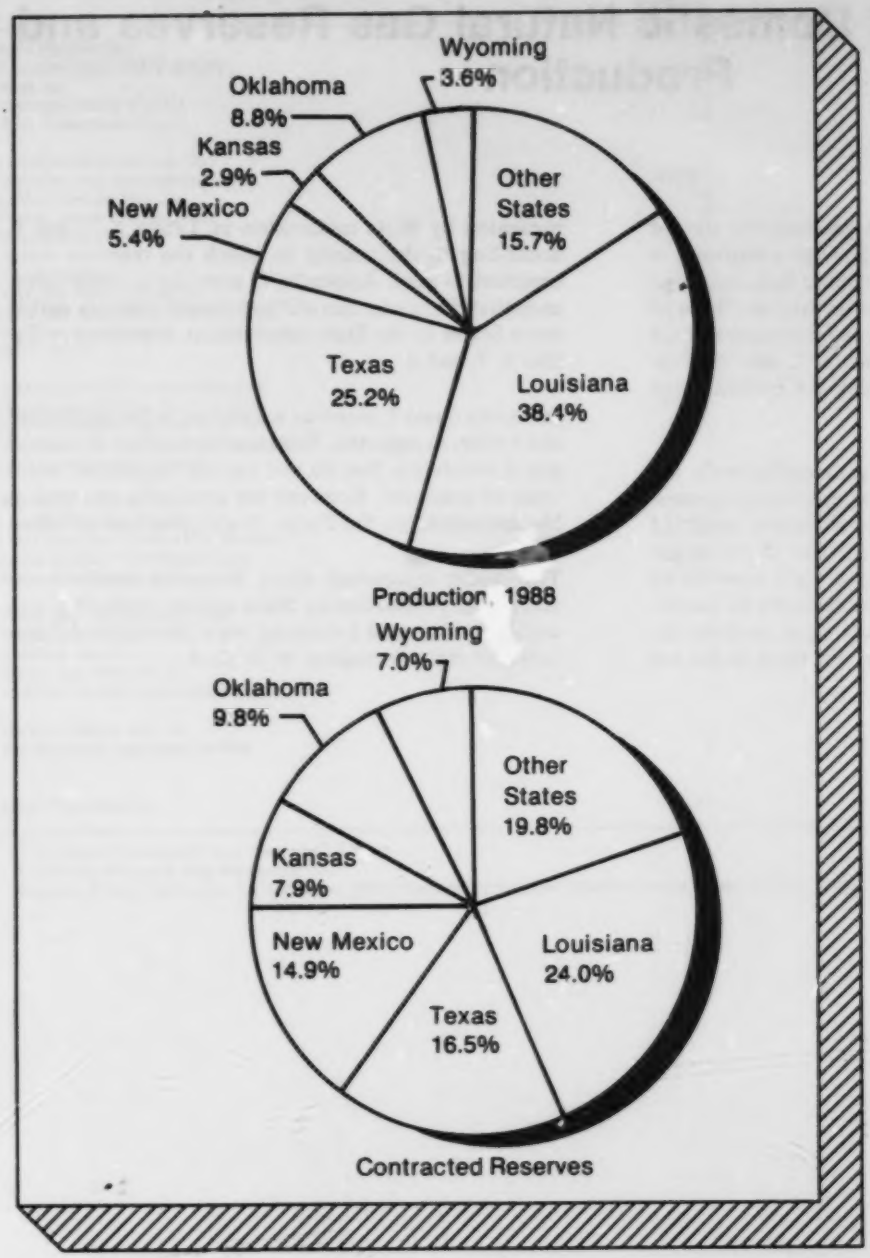
The volume of domestic natural gas reserves owned by or dedicated to the interstate pipeline companies at year-end 1988 totaled 48.8 trillion cubic feet, including 47.3 trillion cubic feet of reserves located in 30 States and 1.5 trillion cubic feet of gas in underground storage but undesignated by State (Tables 6, 7, and 8). Production reported in 31 States totaled 5.8 trillion cubic feet.

Louisiana, New Mexico, and Texas collectively accounted for 55.4 percent of the domestic in-the-ground reserves and 69.0 percent of the production reported in 1988 (Figure 3). Although the Form 15 no longer requires respondents to report natural gas reserves by FERC gas area, the traditional subdivisions of Louisiana, New Mexico, and Texas have been retained for historical continuity. The reserves for these States are presented by State subdivision in Tables 6, 7, and 8, according to the county in which the reserves were reported to exist. Appendix C provides a ready reference that the reader can utilize to relate counties within these States to the State subdivisions appearing in Tables 6, 7, and 8.

In Tables 6 and 7, reserves are shown as **Nonassociated** and **Other**, as reported. **Nonassociated** refers to natural gas in reservoirs that do not contain significant quantities of crude oil. Reserves not explicitly reported as **Nonassociated** on the Form 15 are classified as **Other**.

The reader concerned about historical trends in reserves and production by State and by producing area within the States of Louisiana, New Mexico, and Texas will find this information in Table 8.

Figure 3. Distribution of Reserves and Production by State



Source: Energy Information Administration, Form FERC-15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 6. Summary of Dedicated Gas Production and Reserves by Type of Gas by State
(Million Cubic Feet)

State	1988 Year-End Reserves			Production
	Total	Non-associated	Other	
Alabama	111,617	108,050	3,567	30,711
Arizona	846	846	0	9
Arkansas	1,454,149	1,443,589	10,560	169,576
California	258,912	0	258,912	27,689
Colorado	829,242	689,407	139,835	68,045
Florida	10,194	0	10,194	2,038
Illinois	9,374	7,982	1,392	15,399
Indiana	0	0	0	2
Iowa	12,864	12,864	0	26,920
Kansas	3,834,970	3,820,906	14,064	167,339
Kentucky	671,686	671,686	0	47,678
Louisiana	11,689,297	9,921,676	1,767,621	2,226,857
Northern Louisiana	1,216,031	1,152,134	63,897	145,485
Southern Louisiana Onshore	2,184,550	2,013,539	171,011	332,228
Southern Louisiana Warranty[a]	117,376	0	117,376	152,066
Total Louisiana Offshore	8,171,340	6,756,003	1,415,337	1,597,078
Maryland	40,210	40,210	0	71,495
Massachusetts	0	0	0	16,523
Michigan	140,245	140,245	0	6,850
Mississippi	413,975	406,025	7,950	134,754
Montana	447,594	445,569	2,025	20,980
Nebraska	89,574	89,574	0	401
New Mexico	7,278,832	6,734,414	544,418	314,040
San Juan Basin	6,043,982	5,968,738	75,244	173,223
New Mexico Permian Basin	1,234,850	765,676	469,174	140,817
New York	169,239	169,239	0	26,645
North Dakota	45,520	2,495	43,025	16,175
Ohio	293,096	256,150	36,946	16,748
Oklahoma	4,779,706	4,441,375	338,331	511,997
Pennsylvania	888,883	866,344	22,539	48,411
South Dakota	3,607	3,607	0	545
Tennessee	16,270	0	16,270	2,655
Texas	8,073,055	7,269,234	803,821	1,461,695
Texas Railroad District No. 1 (North)	2,330	2,330	0	200
Texas Railroad District No. 1 (South)	113,096	65,231	47,865	29,116
Texas Railroad District No. 2	292,531	280,498	12,033	51,779
Texas Railroad District No. 3	154,176	127,067	27,109	34,464
Texas Railroad District No. 4	669,620	555,732	113,888	168,840
Texas Railroad District No. 5	1,347	504	843	395
Texas Railroad District No. 6	965,946	952,269	13,677	111,431
Texas Railroad District No. 7B	107,491	107,222	269	81,835
Texas Railroad District No. 7C	329,957	154,943	175,014	43,760
Texas Railroad District No. 8	782,113	586,282	195,831	90,144
Texas Railroad District No. 8A	29,688	1,763	27,925	3,228
Texas Railroad District No. 9	142,371	118,582	23,789	31,226
Texas Railroad District No. 10	1,678,385	1,611,068	67,317	178,025
Total Texas Offshore	2,804,004	2,705,743	98,261	637,452
Utah	500,910	472,467	28,443	27,088
Virginia	145,233	145,233	0	15,992
Washington	5,416	5,416	0	0
West Virginia	1,587,118	1,482,370	104,748	119,358
Wyoming	3,452,276	3,134,002	318,274	209,300
Undesignated[b]	1,537,649	1,537,649	0	38
Total All States	48,791,559	44,318,624	4,472,935	5,804,155

[a] Warranty reserves are reserves guaranteed by contract but not supported by dedication of specific approved sources of supply.
[b] Includes reserves in underground storage which were reported without a State designation.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company
(Million Cubic Feet)

State	1988 Year-End Reserves			Production
	Total	Non-associated	Other	
Alabama				
Florida Gas Transmission Co[a]	45,434	42,541	2,893	6,961
Southern Natural Gas Co[a]	39,015	38,489	526	17,987
Tennessee Gas Pipeline Div Tenneco	23,974	23,826	148	5,763
United Gas Pipe Line Co[a]	3,194	3,194	0	0
State Total	111,617	108,050	3,567	30,711
Arizona				
El Paso Natural Gas Co[a]	846	846	0	9
State Total	846	846	0	9
Arkansas				
Arkansas Oklahoma Gas Corp	6,378	6,378	0	423
Arkla Inc[a]	1,113,996	1,104,777	9,219	86,472
Columbia Gas Transmission Corp[a]	69,633	69,633	0	2,163
International Paper Co	1,103	0	1,103	173
Louisiana-Nevada Transit Co	30,966	30,966	0	0
Mississippi River Transmission Corp	167,960	167,960	0	73,948
Natural Gas Pipeline Co of America[a]	0	0	0	45
Tennessee Gas Pipeline Div Tenneco	61,728	61,728	0	3,706
Texas Eastern Transmission Corp[a]	2,385	2,147	238	2,645
United Gas Pipe Line Co[a]	0	0	0	3
State Total	1,454,149	1,443,589	10,560	169,576
California				
Pacific Interstate Offshore Co	94,662	0	94,662	16,644
Pacific Offshore Pipeline Co	164,250	0	164,250	11,045
State Total	258,912	0	258,912	27,689
Colorado				
Colorado Interstate Gas Co[a]	55,994	39,453	16,541	19,174
El Paso Natural Gas Co[a]	75,916	36,550	39,366	6,233
K N Energy Inc[a]	63,292	63,292	0	5,937
Natural Gas Pipeline Co of America[a]	19,700	18,591	1,109	2,656
Northern Natural Div InterNorth Inc[a]	560	354	206	563
Northwest Pipeline Corp[a]	313,042	308,547	4,495	10,448
Panhandle Eastern Pipe Line Co[a]	161,693	83,575	78,118	5,747
Questar Pipeline Company	73,475	73,475	0	11,272
Williams Natural Gas Co[a]	65,570	65,570	0	6,015
State Total	829,242	689,407	139,835	68,045
Florida				
Florida Gas Transmission Co[a]	8,420	0	8,420	1,738
Tennessee Gas Pipeline Div Tenneco	1,774	0	1,774	300
State Total	10,194	0	10,194	2,038
Illinois				
Mississippi River Transmission Corp	7,970	7,970	0	15,206
Natural Gas Pipeline Co of America[a]	0	0	0	11
Texas Eastern Transmission Corp[a]	592	0	592	9
Trunkline Gas Co[a]	812	12	800	173
State Total	9,374	7,982	1,392	15,399
Indiana				
Texas Eastern Transmission Corp[a]	0	0	0	2
State Total	0	0	0	2
Iowa				
Iowa-Illinois Gas & Electric Co	12,864	12,864	0	26,920
State Total	12,864	12,864	0	26,920
Kansas				
ANR Pipeline Co[a]	4,704	4,627	77	924
Arkla Inc[a]	1,861	1,861	0	157
Colorado Interstate Gas Co[a]	678,526	678,526	0	9,825
K N Energy Inc[a]	617,890	617,890	0	39,859
Natural Gas Pipeline Co of America[a]	2,616	2,285	331	664

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)
(Million Cubic Feet)

State	1988 Year-End Reserves			Production
	Total	Non-associated	Other	
Kansas				
Northern Natural Div InterNorth Inc[a]	376,956	374,492	2,464	29,584
Panhandle Eastern Pipe Line Co[a]	443,307	432,115	11,192	4,781
Western Gas Interstate Co	0	0	0	5
Williams Natural Gas Co[a]	1,702,837	1,702,837	0	80,385
Zenith Natural Gas Co	6,273	6,273	0	1,155
State Total	3,834,970	3,820,906	14,064	167,339
Kentucky				
Columbia Gas Transmission Corp[a]	319,790	319,790	0	21,572
Inland Gas Co Inc	32,419	32,419	0	2,289
Kentucky West Va Gas Co	313,446	313,446	0	22,518
Tennessee Gas Pipeline Div Tenneco	3,815	3,815	0	0
Texas Eastern Transmission Corp[a]	1,132	1,132	0	1,234
Texas Gas Transmission Corp[a]	502	502	0	55
Williams Natural Gas Co[a]	582	582	0	10
State Total	671,686	671,686	0	47,678
Louisiana				
Northern Louisiana				
ANR Pipeline Co[a]	890	194	696	1
Arkla Inc[a]	315,440	315,275	165	33,673
CNG Transmission Corp[a]	211	211	0	56
Columbia Gas Transmission Corp[a]	166,202	165,840	362	21,722
Florida Gas Transmission Co[a]	66,042	65,920	122	11,141
International Paper Co	16,500	0	16,500	1,643
Louisiana-Nevada Transit Co	17,222	17,222	0	2,038
Mid Louisiana Gas Co	69,734	69,734	0	10,000
Mississippi River Transmission Corp	131,104	121,037	10,067	20,751
Natural Gas Pipeline Co of America[a]	40	40	0	0
Southern Natural Gas Co[a]	96,418	96,284	134	11,993
Tennessee Gas Pipeline Div Tenneco	17,748	17,748	0	2,576
Texas Eastern Transmission Corp[a]	62,352	62,018	334	18,969
Texas Gas Transmission Corp[a]	73,684	57,923	15,761	6,310
Transcontinental Gas Pipe Line Corp[a]	22,534	3,317	19,217	2,250
Trunkline Gas Co[a]	31,335	31,262	73	219
United Gas Pipe Line Co[a]	128,575	128,109	466	2,143
Area Total	1,216,031	1,152,134	63,897	145,485
Southern Louisiana Onshore				
ANR Pipeline Co[a]	41,123	37,435	3,688	10,384
Bayou Interstate Pipeline System	355	355	0	690
CNG Transmission Corp[a]	7,848	7,848	0	2,603
Columbia Gas Transmission Corp[a]	570,184	545,714	24,470	102,330
Florida Gas Transmission Co[a]	73,664	66,706	6,958	22,085
Mid Louisiana Gas Co	1,891	1,891	0	1,437
Mississippi River Transmission Corp	3,600	3,600	0	88
Natural Gas Pipeline Co of America[a]	0	0	0	356
Pennsylvania & Southern Gas Co	243	0	243	0
Southern Natural Gas Co[a]	113,359	57,110	56,249	28,495
Tennessee Gas Pipeline Div Tenneco	313,957	265,155	48,802	46,062
Texas Eastern Transmission Corp[a]	51,366	50,616	750	9,061
Texas Gas Transmission Corp[a]	644,689	633,227	11,462	55,000
Transcontinental Gas Pipe Line Corp[a]	263,937	250,437	13,500	43,216
Trunkline Gas Co[a]	37,126	34,440	2,686	6,745
United Gas Pipe Line Co[a]	49,235	47,082	2,153	3,676
Valley Gas Transmission Inc	11,973	11,923	50	0
Area Total	2,184,550	2,013,539	171,011	332,226
Southern Louisiana Warranty[b]				
Texas Eastern Transmission Corp[a]	117,376	0	117,376	152,066
Area Total	117,376	0	117,376	152,066

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)
(Million Cubic Feet)

State	1988 Year-End Reserves			Production
	Total	Non-associated	Other	
Southern Louisiana Offshore				
ANR Pipeline Co[a]	413,027	365,251	47,776	86,130
Arkla Inc[a]	31,592	31,592	0	4,424
CNG Transmission Corp[a]	160,422	147,795	12,627	18,041
Columbia Gas Transmission Corp[a]	875,559	746,104	129,455	129,679
Eastern Shore Natural Gas Co	0	0	0	465
El Paso Natural Gas Co[a]	0	0	0	2
Florida Gas Transmission Co[a]	191,630	184,173	7,457	51,955
Mid Louisiana Gas Co	30,229	30,229	0	8,548
Mississippi River Transmission Corp	6,747	6,747	0	5,069
Natural Gas Pipeline Co of America[a]	183,203	150,123	33,080	35,736
Northern Natural Div InterNorth Inc[a]	88,806	46,362	42,444	46,301
Panhandle Eastern Pipe Line Co[a]	23,337	23,337	0	3,443
Sea Robin Pipeline Co[a]	66,905	47,015	19,890	3,321
Southern Natural Gas Co[a]	854,149	634,635	219,514	164,339
Tennessee Gas Pipeline Div Tenneco	1,908,305	1,535,881	372,424	316,993
Texas Eastern Transmission Corp[a]	1,482,008	1,316,577	165,431	274,908
Texas Gas Transmission Corp[a]	163,456	141,755	21,701	29,108
Transcontinental Gas Pipe Line Corp[a]	1,013,679	788,782	224,897	269,186
Trunkline Gas Co[a]	591,254	504,837	86,417	135,835
United Gas Pipe Line Co[a]	87,032	54,808	32,224	13,595
Area Total	8,171,340	6,756,003	1,415,337	1,597,078
State Total	11,689,297	9,921,676	1,767,621	2,226,857
Maryland				
Columbia Gas Transmission Corp[a]	460	460	0	29
Texas Eastern Transmission Corp[a]	39,750	39,750	0	0
Washington Gas Light Co	0	0	0	71,466
State Total	40,210	40,210	0	71,495
Massachusetts				
Granite State Gas Transmission Inc	0	0	0	16,523
State Total	0	0	0	16,523
Michigan				
ANR Pipeline Co[a]	140,197	140,197	0	0
Michigan Gas Storage Co	48	48	0	6,850
State Total	140,245	140,245	0	6,850
Mississippi				
Alabama-Tennessee Natural Gas Co	1,051	0	1,051	1,408
ANR Pipeline Co[a]	2,926	2,767	159	83
Columbia Gas Transmission Corp[a]	434	434	0	5
Florida Gas Transmission Co[a]	96,932	95,846	1,086	39,133
Mid Louisiana Gas Co	2,987	2,987	0	1,003
Southern Natural Gas Co[a]	122,026	121,535	491	15,979
Tennessee Gas Pipeline Div Tenneco	62,077	58,042	4,035	17,509
Texas Eastern Transmission Corp[a]	5,755	5,747	8	36,868
Transcontinental Gas Pipe Line Corp[a]	102,725	102,412	313	22,253
United Gas Pipe Line Co[a]	17,062	16,255	807	513
State Total	413,975	406,025	7,950	134,754
Montana				
K N Energy Inc[a]	109,803	109,803	0	3,602
Northern Natural Div InterNorth Inc[a]	41,452	41,455	-3	13,207
Williston Basin Interstate Pipeline[a]	296,339	294,311	2,028	4,171
State Total	447,594	445,569	2,025	20,980
Nebraska				
K N Energy Inc[a]	89,574	89,574	0	401
State Total	89,574	89,574	0	401
New Mexico				
San Juan Basin				
El Paso Natural Gas Co[a]	4,797,688	4,722,444	75,244	129,172
Natural Gas Pipeline Co of America[a]	14	14	0	0
Northwest Pipeline Corp[a]	1,246,280	1,246,280	0	44,051

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)
(Million Cubic Feet)

State	1988 Year-End Reserves			Production
	Total	Non-associated	Other	
Area Total	6,043,982	5,968,738	75,244	173,223
New Mexico Permian Basin				
Colorado Interstate Gas Co[a]	1,015	1,015	0	191
El Paso Natural Gas Co[a]	672,932	220,937	451,995	39,852
Natural Gas Pipeline Co of America[a]	71,464	70,193	1,271	15,434
Northern Natural Div InterNorth Inc[a]	142,861	134,006	8,855	27,159
Panhandle Eastern Pipe Line Co[a]	0	0	0	7
Tennessee Gas Pipeline Div Tenneco	1,554	1,554	0	0
Transcontinental Gas Pipe Line Corp[a]	30	30	0	32
Transwestern Pipeline Co[a]	340,875	333,822	7,053	58,142
United Gas Pipe Line Co[a]	4,119	4,119	0	0
Area Total	1,234,850	765,676	469,174	140,817
State Total	7,278,832	6,734,414	544,418	314,040
New York				
CNG Transmission Corp[a]	13,060	13,060	0	350
Columbia Gas Transmission Corp[a]	80,788	80,788	0	5,142
National Fuel Gas Supply Corp	58,524	58,524	0	2,700
Orange & Rockland Utilities Inc	9,370	9,370	0	18,453
Tennessee Gas Pipeline Div Tenneco	7,497	7,497	0	0
State Total	169,239	169,239	0	26,645
North Dakota				
Williston Basin Interstate Pipeline[a]	45,520	2,495	43,025	16,175
State Total	45,520	2,495	43,025	16,175
Ohio				
Columbia Gas Transmission Corp[a]	271,126	231,791	39,335	14,961
Eastern Shore Natural Gas Co	0	0	0	94
Gas Transport Inc	11,020	13,930	-2,910	1,102
Tennessee Gas Pipeline Div Tenneco	7,583	7,062	521	63
Texas Eastern Transmission Corp[a]	3,367	3,367	0	528
State Total	293,096	256,150	36,946	16,748
Oklahoma				
ANR Pipeline Co[a]	458,880	430,893	27,987	41,700
Arkansas Oklahoma Gas Corp	21,394	21,394	0	1,505
Arkla Inc[a]	1,665,505	1,663,041	2,464	182,563
Cimarron Transmission Co	13,571	963	12,608	2,686
Colorado Interstate Gas Co[a]	198,612	198,612	0	10,503
Columbia Gas Transmission Corp[a]	16,992	16,992	0	1,265
El Paso Natural Gas Co[a]	641,250	572,400	68,850	47,064
K N Energy Inc[a]	65,629	65,629	0	10,348
Lone Star Gas Co Div Enserch Corp	93,736	13,790	79,946	16,993
Mississippi River Transmission Corp	37,855	37,855	0	30,308
Natural Gas Pipeline Co of America[a]	95,516	89,629	5,887	23,679
Northern Natural Div InterNorth Inc[a]	264,468	258,966	5,502	44,661
Northwest Pipeline Corp[a]	2,608	2,608	0	96
Panhandle Eastern Pipe Line Co[a]	384,265	316,495	67,770	21,609
Ringwood Gathering Co	41,990	0	41,990	7,335
Southern Natural Gas Co[a]	1,492	1,492	0	289
Tennessee Gas Pipeline Div Tenneco	54,527	54,183	344	9,201
Texas Gas Transmission Corp[a]	532	532	0	180
Transcontinental Gas Pipe Line Corp[a]	3,805	3,805	0	615
Transwestern Pipeline Co[a]	178,582	172,206	6,376	23,088
United Gas Pipe Line Co[a]	5,203	5,203	0	112
Western Gas Interstate Co	18,607	0	18,607	1,892
Williams Natural Gas Co[a]	513,927	513,927	0	34,281
Zenith Natural Gas Co	760	760	0	24
State Total	4,779,706	4,441,375	338,331	511,997
Pennsylvania				
Carnegie Natural Gas Co	20,744	20,744	0	1,143
CNG Transmission Corp[a]	153,965	153,965	0	9,146
Columbia Gas Transmission Corp[a]	198,299	198,299	0	17,585
Equitrans Inc.	38,219	15,680	22,539	2,108
National Fuel Gas Supply Corp	257,147	257,147	0	16,295

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)
(Million Cubic Feet)

State	1988 Year-End Reserves			Production
	Total	Non-associated	Other	
Pennsylvania				
North Penn Gas Co	10,115	10,115	0	1,149
Tennessee Gas Pipeline Div Tenneco	137,544	137,544	0	52
Texas Eastern Transmission Corp[a]	72,850	72,850	0	933
State Total	888,883	866,344	22,539	48,411
South Dakota				
Williston Basin Interstate Pipeline[a]	3,607	3,607	0	545
State Total	3,607	3,607	0	545
Tennessee				
East Tennessee Natural Gas Co	16,270	0	16,270	2,655
State Total	16,270	0	16,270	2,655
Texas Railroad District No. 1 (North)				
Northern Natural Div InterNorth Inc[a]	2,330	2,330	0	200
District Total	2,330	2,330	0	200
Texas Railroad District No. 1 (South)				
Natural Gas Pipeline Co of America[a]	109	109	0	19
Northern Natural Div InterNorth Inc[a]	4,810	4,623	187	4,097
Tennessee Gas Pipeline Div Tenneco	1,889	48	1,841	899
Texas Eastern Transmission Corp[a]	56,990	18,614	38,376	13,575
Transcontinental Gas Pipe Line Corp[a]	49,298	41,837	7,461	10,526
District Total	113,096	65,231	47,865	29,116
Texas Railroad District No. 2				
El Paso Natural Gas Co[a]	22,983	22,983	0	7,385
Florida Gas Transmission Co[a]	8,636	7,670	966	2,857
Mississippi River Transmission Corp	300	300	0	320
Natural Gas Pipeline Co of America[a]	4,820	4,403	417	1,838
Tennessee Gas Pipeline Div Tenneco	44,246	43,490	756	7,219
Texas Eastern Transmission Corp[a]	155,802	153,663	1,9[illegible]	21,644
Transcontinental Gas Pipe Line Corp[a]	30,488	25,354	5,134	5,174
Trunkline Gas Co[a]	4,698	4,673	25	3,866
United Gas Pipe Line Co[a]	20,667	17,871	2,796	1,462
Valero Interstate Transmission Co[a]	91	91	0	14
District Total	292,531	280,498	12,033	51,779
Texas Railroad District No. 3				
Columbia Gas Transmission Corp[a]	5,693	5,693	0	1,166
Florida Gas Transmission Co[a]	9,817	9,011	806	3,423
Mississippi River Transmission Corp	400	400	0	411
Natural Gas Pipeline Co of America[a]	3,389	3,035	354	2,380
Northern Natural Div InterNorth Inc[a]	6,878	2,375	4,503	1,468
Tennessee Gas Pipeline Div Tenneco	46,784	32,658	14,126	9,130
Texas Eastern Transmission Corp[a]	32,284	30,919	1,365	5,770
Texas Gas Pipeline Corp	9,180	9,180	0	1,933
Texas Gas Transmission Corp[a]	17,398	17,398	0	900
Transcontinental Gas Pipe Line Corp[a]	8,915	6,466	2,449	3,718
Trunkline Gas Co[a]	7,246	3,862	3,384	4,144
United Gas Pipe Line Co[a]	6,192	6,070	122	21
District Total	154,176	127,067	27,109	34,464
Texas Railroad District No. 4				
Columbia Gas Transmission Corp[a]	48,133	0	48,133	8,084
Eastern Shore Natural Gas Co	0	0	0	1,153
Florida Gas Transmission Co[a]	40,305	39,927	378	13,025
Mississippi River Transmission Corp	1,000	1,000	0	1,156
Natural Gas Pipeline Co of America[a]	55,498	52,353	3,145	5,843
Tennessee Gas Pipeline Div Tenneco	301,956	249,251	52,705	52,839
Texas Eastern Transmission Corp[a]	82,225	81,158	1,067	15,294
Transcontinental Gas Pipe Line Corp[a]	99,546	91,210	8,336	52,117
Trunkline Gas Co[a]	1,836	1,836	0	1,376
United Gas Pipe Line Co[a]	2,745	2,621	124	139
Valero Interstate Transmission Co[a]	36,376	36,376	0	19,834

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)

(Million Cubic Feet)

State	1988 Year End Reserves			Production
	Total	Non-associated	Other	
District Total	669,620	555,732	113,888	168,840
Texas Railroad District No. 5				
United Gas Pipe Line Co[a]	1,347	504	843	395
District Total	1,347	504	843	395
Texas Railroad District No. 6				
Arkla Inc[a]	381,331	379,235	2,096	22,960
Mississippi River Transmission Corp	26,919	26,815	104	9,798
Natural Gas Pipeline Co of America[a]	16,679	16,616	63	1,778
Southern Natural Gas Co[a]	38,744	38,185	559	8,267
Tennessee Gas Pipeline Div Tenneco	115,893	114,776	1,117	30,985
Texas Eastern Transmission Corp[a]	257,550	254,673	2,877	29,736
Texas Gas Transmission Corp[a]	37,981	37,801	180	3,714
Transcontinental Gas Pipe Line Corp[a]	1,105	1,105	0	379
United Gas Pipe Line Co[a]	89,744	83,063	6,681	3,934
District Total	965,946	952,269	13,677	111,431
Texas Railroad District No. 7B				
El Paso Natural Gas Co[a]	269	0	269	21
Florida Gas Transmission Co[a]	107,021	107,021	0	81,692
Northern Natural Div InterNorth Inc[a]	201	201	0	122
District Total	107,491	107,222	269	81,835
Texas Railroad District No. 7C				
El Paso Natural Gas Co[a]	268,517	107,930	160,587	21,563
Natural Gas Pipeline Co of America[a]	920	920	0	385
Northern Natural Div InterNorth Inc[a]	59,374	44,947	14,427	21,422
Panhandle Eastern Pipe Line Co[a]	507	507	0	96
Transcontinental Gas Pipe Line Corp[a]	639	639	0	294
District Total	329,957	154,943	175,014	43,760
Texas Railroad District No. 8				
El Paso Natural Gas Co[a]	183,425	39,091	144,334	14,826
Natural Gas Pipeline Co of America[a]	37,061	37,061	0	10,677
Northern Natural Div InterNorth Inc[a]	238,339	193,597	44,742	34,531
Texas Gas Transmission Corp[a]	772	772	0	91
Transcontinental Gas Pipe Line Corp[a]	619	511	108	197
Transwestern Pipeline Co[a]	308,573	302,303	6,270	29,231
West Texas Gathering Co[a]	13,324	12,947	377	591
District Total	782,113	586,282	195,831	90,144
Texas Railroad District No. 8A				
El Paso Natural Gas Co[a]	26,630	0	26,630	2,110
Northern Natural Div InterNorth Inc[a]	3,058	1,763	1,295	1,118
District Total	29,688	1,763	27,925	3,228
Texas Railroad District No. 9				
Lone Star Gas Co Div Enserch Corp	7,803	6,461	1,342	1,882
Natural Gas Pipeline Co of America[a]	134,568	112,121	22,447	29,344
District Total	142,371	118,582	23,789	31,226
Texas Railroad District No. 10				
ANR Pipeline Co[a]	21,620	18,438	3,182	11,943
Arkla Inc[a]	65,744	65,744	0	6,074
Caprock Pipeline Co	33,498	33,498	0	0
Colorado Interstate Gas Co[a]	569,609	550,580	19,029	38,254
El Paso Natural Gas Co[a]	131,413	129,233	2,180	10,972
K N Energy Inc[a]	37,284	37,284	0	3,077
Mississippi River Transmission Corp	33,356	32,374	982	5,732
Natural Gas Pipeline Co of America[a]	144,665	140,890	3,775	24,302
Northern Natural Div InterNorth Inc[a]	229,185	214,725	14,460	48,220
Panhandle Eastern Pipe Line Co[a]	183,257	169,637	13,620	5,589
Southern Natural Gas Co[a]	1,265	407	858	559
Texas Gas Transmission Corp[a]	402	402	0	0
Transcontinental Gas Pipe Line Corp[a]	94	94	0	21
Transwestern Pipeline Co[a]	133,525	124,873	8,652	14,284
Western Gas Interstate Co	579	0	579	834
Williams Natural Gas Co[a]	92,889	92,889	0	8,064

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)

(Million Cubic Feet)

State	1988 Year-End Reserves			Production
	Total	Non-associated	Other	
District Total	1,678,385	1,611,068	67,317	178,025
Texas Offshore				
ANR Pipeline Co[a]	219,319	209,916	9,403	24,267
CNG Transmission Corp[a]	95,451	95,451	0	10,207
Columbia Gas Transmission Corp[a]	83,209	82,309	900	5,915
Eastern Shore Natural Gas Co	0	0	0	300
El Paso Natural Gas Co[a]	32,831	30,681	2,150	7,376
Florida Gas Transmission Co[a]	31,371	31,358	13	15,727
Natural Gas Pipeline Co of America[a]	86,679	84,877	1,802	7,881
Northern Natural Div InterNorth Inc[a]	35,296	34,280	1,016	23,019
Panhandle Eastern Pipe Line Co[a]	8,482	7,754	728	183
Southern Natural Gas Co[a]	170,577	127,201	43,376	30,898
Tennessee Gas Pipeline Div Tenneco	282,357	282,357	0	53,315
Texas Eastern Transmission Corp[a]	197,682	197,682	0	25,498
Texas Gas Transmission Corp[a]	106,085	92,344	13,741	14,640
Transcontinental Gas Pipe Line Corp[a]	1,336,951	1,315,548	21,403	395,340
Trunkline Gas Co[a]	52,463	50,320	2,143	16,579
United Gas Pipe Line Co[a]	65,251	63,665	1,586	6,327
District Total	2,804,004	2,705,743	98,261	637,452
State Total	8,073,055	7,269,234	803,821	1,461,895
Utah				
Colorado Interstate Gas Co[a]	204,413	204,413	0	8,453
El Paso Natural Gas Co[a]	7,425	7,425	0	378
Natural Gas Pipeline Co of America[a]	80,377	80,377	0	105
Northwest Pipeline Corp[a]	81,070	52,627	28,443	2,284
Questar Pipeline Company	127,625	127,625	0	15,868
State Total	500,910	472,467	28,443	27,088
Virginia				
Columbia Gas Transmission Corp[a]	101,378	101,378	0	6,170
East Tennessee Natural Gas Co	43,855	43,855	0	9,822
State Total	145,233	145,233	0	15,992
Washington				
Northwest Pipeline Corp[a]	5,416	5,416	0	0
State Total	5,416	5,416	0	0
West Virginia				
Carnegie Natural Gas Co	40,229	40,229	0	3,446
CNG Transmission Corp[a]	656,412	656,412	0	54,373
Columbia Gas Transmission Corp[a]	694,368	694,368	0	43,956
Eastern Shore Natural Gas Co	0	0	0	4,606
Equitrans Inc.	134,869	30,121	104,748	12,889
Tennessee Gas Pipeline Div Tenneco	56,240	56,240	0	0
Texas Eastern Transmission Corp[a]	901	901	0	88
Washington Gas Light Co	4,099	4,099	0	0
State Total	1,587,118	1,482,370	104,748	119,358
Wyoming				
ANR Pipeline Co[a]	503,462	506,462	0	8,085
Colorado Interstate Gas Co[a]	655,320	609,523	45,797	35,122
Columbia Gas Transmission Corp[a]	351,667	351,667	0	13,486
Glacier Gas Co	2,862	2,862	0	293
K N Energy Inc[a]	99,324	99,324	0	14,884
MIGC,Inc	28,001	0	28,001	3,501
Natural Gas Pipeline Co of America[a]	190,825	190,825	0	14,725
Northern Natural Div InterNorth Inc[a]	12,018	893	11,125	11,198
Northwest Pipeline Corp[a]	603,055	488,964	114,091	26,145
Pacific Gas Transmission Co	26,159	26,159	0	3,138
Panhandle Eastern Pipe Line Co[a]	117,327	34,476	82,851	15,823
Questar Pipeline Company	353,347	353,347	0	28,321
Williams Natural Gas Co[a]	437,429	437,429	0	25,137
Williston Basin Interstate Pipeline[a]	68,480	32,071	36,409	9,442
State Total	3,452,276	3,134,002	318,274	209,300

Note: Footnotes appear at the end of the table.

Table 7. Dedicated Gas Production and Reserves by Type of Gas by State and Company (Continued)
(Million Cubic Feet)

State	1988 Year-End Reserves			Production
	Total	Non-associated	Other	
Undesignated[c]				
Arkla Inc[a]	31,088	31,088	0	0
CNG Transmission Corp[a]	258,802	258,802	0	0
Colorado Interstate Gas Co[a]	64,323	64,323	0	0
Columbia Gas Transmission Corp[a]	570,806	570,806	0	0
Equitrans Inc.	43,006	43,006	0	0
Mid Louisiana Gas Co	1,713	1,713	0	38
Natural Gas Pipeline Co of America[a]	304,947	304,947	0	0
Panhandle Eastern Pipe Line Co[a]	126,246	126,246	0	0
Pennsylvania & Southern Gas Co	439	439	0	0
Questar Pipeline Company	18,520	18,520	0	0
Texas Gas Transmission Corp[a]	117,759	117,759	0	0
Undesignated Total	1,537,649	1,537,649	0	38
Total All Companies	48,791,559	44,318,624	4,472,935	5,804,155

[a] Companies with over 900 billion cubic feet of domestic in-the-ground reserves at the inception of the Form 15 report or date of first filing.
[b] Warranty reserves are reserves guaranteed by contract but not supported by dedication of specific approved sources of supply.
[c] Includes reserves in underground storage which were reported without a State designation.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Alabama						
	1963	12	0	13	0	0.9
	1964	240	240	12	228	20.0
	1965	201	7	46	-39	4.4
	1966	199	12	14	-2	14.2
	1967	198	0	1	-1	198.0
	1968	0	-197	1	-198	.0
	1969	1,400	1,400	0	1,400	.0
	1970	1,400	0	0	0	.0
	1971	51,765	50,365	0	50,365	.0
	1972	137,410	86,431	786	85,645	174.8
	1973	116,416	-18,728	2,266	-20,994	51.4
	1974	110,719	-400	5,297	-5,697	20.9
	1975	95,150	-10,089	5,480	-15,569	17.4
	1976	92,434	3,085	5,801	-2,716	15.9
	1977	77,720	-6,009	8,705	-14,714	8.9
	1978	72,407	7,946	13,259	-5,313	5.5
	1979	159,013	103,916	17,310	86,606	9.2
	1980	155,576	33,155	36,592	-3,437	4.3
	1981	176,565	61,856	40,867	20,989	4.3
	1982	145,743	8,131	38,953	-30,822	3.7
	1983	192,535	76,871	30,079	46,792	6.4
	1984	145,678	-13,204	33,653	-46,857	4.3
	1985	178,606	69,029	36,101	32,928	4.9
	1986	168,152	15,426	25,880	-10,454	6.5
	1987	114,105	-26,520	27,527	-54,047	4.1
	1988	111,617	28,223	30,711	-2,486	3.6
Total (1963-1988)		—	470,946	359,341	111,605	—
Percent Change		930,041.7	—	236,138.5	—	—
Arizona						
	1963	26,400	0	1,300	0	20.3
	1964	21,000	-3,900	1,500	-5,400	14.0
	1965	19,200	0	1,800	-1,800	10.7
	1966	20,400	2,900	1,700	1,200	12.0
	1967	19,100	0	1,300	-1,300	14.7
	1968	18,200	0	900	-900	20.2
	1969	13,100	-4,000	1,100	-5,100	11.9
	1970	11,900	0	1,200	-1,200	9.9
	1971	11,100	0	800	-800	13.9
	1972	10,600	0	500	-500	21.2
	1973	698	-9,700	202	-9,902	3.5
	1987	50	-575	73	-648	.7
	1988	846	805	9	796	94.0
Total (1963-1988)		—	-14,470	11,084	-25,554	—
Percent Change		-96.8	—	-99.3	—	—
Arkansas						
	1963	1,143,481	0	47,190	0	24.2
	1964	1,336,350	240,653	47,784	192,869	28.0
	1965	1,578,888	296,758	54,220	242,538	29.1
	1966	1,699,979	198,150	77,059	121,091	22.1
	1967	1,903,551	294,286	90,714	203,572	21.0
	1968	1,884,438	94,242	113,355	-19,113	16.6
	1969	1,780,019	33,941	138,360	-104,419	12.9
	1970	1,727,915	91,999	144,103	-52,104	12.0
	1971	1,700,972	104,592	131,535	-26,943	12.9
	1972	1,709,983	136,101	127,090	9,011	13.5
	1973	1,719,005	131,247	122,225	9,022	14.1
	1974	1,631,016	-446	87,543	-87,989	18.6
	1975	1,546,842	-8,087	76,087	-84,174	20.3
	1976	1,510,634	34,598	70,806	-36,208	21.3
	1977	1,466,949	31,309	74,994	-43,685	19.6
	1978	1,318,789	-60,352	87,808	-148,160	15.0
	1979	1,284,003	42,424	77,210	-34,786	16.6

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)
(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Arkansas						
	1980	1,225,663	13,256	71,596	-58,340	17.1
	1981	1,289,247	130,727	67,143	63,584	19.2
	1982	1,346,979	145,493	87,761	57,732	15.3
	1983	1,396,771	128,954	79,162	49,792	17.6
	1984	1,388,472	75,235	83,534	-8,299	16.6
	1985	1,364,442	90,486	114,516	-24,030	11.9
	1986	1,399,368	173,829	138,903	34,926	10.1
	1987	1,421,750	189,267	166,885	22,382	8.5
	1988	1,454,149	201,977	169,578	32,399	8.6
Total (1963-1988)		—	2,810,639	2,499,971	310,668	--
Percent Change		27.2	—	259.4	--	--
California						
	1984	328,108	328,108	0	328,108	.0
	1985	286,959	-41,149	0	-41,149	.0
	1986	251,721	-35,238	0	-35,238	.0
	1987	116,244	-114,746	20,731	-135,477	5.6
	1988	258,912	170,357	27,689	142,668	9.4
Total (1963-1988)		—	307,332	48,420	258,912	--
Percent Change		-21.1	—	—	--	--
Colorado						
	1963	1,030,172	0	40,174	0	25.6
	1964	1,040,997	52,969	42,144	10,825	24.7
	1965	1,438,536	446,551	49,012	397,539	29.4
	1966	1,730,282	350,064	58,318	291,746	29.7
	1967	1,693,474	28,583	65,391	-36,808	25.9
	1968	1,703,917	84,874	74,431	10,443	22.9
	1969	1,636,648	7,733	75,002	-67,269	21.8
	1970	1,986,609	430,847	80,886	349,961	24.6
	1971	1,902,460	-4,080	80,069	-84,149	23.8
	1972	1,797,207	-22,117	83,136	-105,253	21.6
	1973	1,974,426	279,073	101,854	177,219	19.4
	1974	1,700,975	-169,958	103,493	-273,451	16.4
	1975	1,875,520	310,137	135,592	174,545	13.8
	1976	1,652,940	-84,285	138,295	-222,580	12.0
	1977	1,789,280	283,423	147,083	136,340	12.2
	1978	1,820,473	181,618	150,425	31,193	12.1
	1979	2,102,443	437,049	155,079	281,970	13.6
	1980	2,215,759	270,701	157,385	113,316	14.1
	1981	1,702,316	-354,804	158,639	-513,443	10.7
	1982	1,667,950	146,473	160,839	-14,366	10.5
	1983	1,716,983	151,073	122,040	29,033	14.1
	1984	1,554,239	-46,482	116,262	-162,744	13.4
	1985	1,513,729	54,670	95,180	-40,510	15.9
	1986	1,469,350	36,567	80,946	-44,379	18.2
	1987	1,285,922	-113,454	69,974	-183,428	18.4
	1988	829,242	-388,635	68,045	-456,680	12.2
Total (1963-1988)		—	2,368,590	2,569,520	-200,930	--
Percent Change		-19.5	—	69.4	--	--
Florida						
	1970	11,998	12,000	2	11,998	5,999.0
	1971	359,309	348,000	689	347,311	521.5
	1972	355,296	9,103	13,116	-4,013	27.1
	1973	314,560	-14,003	26,733	-40,736	11.8
	1974	259,535	-28,087	26,938	-55,025	9.6
	1975	233,475	-5,574	20,486	-26,060	11.4
	1976	217,340	0	16,135	-16,135	13.5
	1977	100,332	-100,002	17,006	-117,008	5.9
	1978	82,014	121	18,439	-18,318	4.4
	1979	64,193	0	17,821	-17,821	3.6

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Florida						
	1980	38,534	-10,663	14,996	-25,659	2.6
	1981	25,802	-3,073	9,659	-12,732	2.7
	1982	24,782	6,704	7,724	-1,020	3.2
	1983	49,506	31,109	6,385	24,724	7.8
	1984	46,540	-51	2,915	-2,966	16.0
	1985	55,130	11,359	2,769	8,590	19.9
	1986	46,529	-6,713	1,886	-8,601	24.6
	1987	13,841	-30,699	2,189	-32,888	6.2
	1988	10,194	-1,409	2,038	-3,447	5.0
Total (1963-1988)		—	218,122	207,928	10,194	—
Percent Change		-15.0	—	101,800.0	—	—
Idaho						
	1981	0	524	524	0	.0
	1982	0	78	78	0	.0
Total (1963-1988)		—	602	602	—	—
Percent Change		—	—	-100.0	—	—
Illinois						
	1963	1,596	0	426	0	3.7
	1964	0	-1,198	396	-1,596	.0
	1972	266	361	95	266	2.8
	1973	0	-197	69	-266	.0
	1976	0	131	131	0	.0
	1978	534	726	192	534	2.8
	1979	251	-97	186	-283	1.3
	1980	60,105	60,095	241	59,854	249.4
	1981	5,864	-54,046	195	-54,241	30.1
	1982	5,988	600	476	124	12.6
	1983	4,342	-1,412	234	-1,646	18.6
	1984	4,548	423	217	206	21.0
	1985	8,339	5,010	1,219	3,791	6.8
	1986	8,021	5,423	5,741	-318	1.4
	1987	25,834	32,311	14,498	17,813	1.8
	1988	9,374	-1,061	15,399	-16,460	.6
Total (1963-1988)		—	47,069	39,291	7,778	—
Percent Change		487.3	—	3,497.9	—	—
Indiana						
	1978	120	153	33	120	3.6
	1979	1,668	1,714	166	1,548	10.0
	1980	253,778	261,697	9,587	252,110	26.5
	1981	117,249	-130,367	6,162	-136,529	19.0
	1982	814	-116,397	38	-116,435	21.4
	1983	398	-408	8	-416	49.8
	1984	13	-385	0	-385	.0
	1988	0	-11	2	-13	.0
Total (1963-1988)		—	15,996	15,996	—	—
Percent Change		-100.0	—	-93.9	—	—
Iowa						
	1980	53,636	53,636	0	53,636	.0
	1987	0	-17,734	35,902	-53,636	.0
	1988	12,864	39,764	26,920	12,864	.5
Total (1963-1988)		—	75,686	62,822	12,864	—
Percent Change		-76.0	—	—	—	—

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)
(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Kansas						
	1963	15,414,829	0	633,661	0	24.3
	1964	15,172,476	415,822	658,175	-242,353	23.1
	1965	14,733,216	223,113	662,373	-439,260	22.2
	1966	14,130,876	96,987	699,327	-602,340	20.2
	1967	13,748,844	334,322	716,354	-382,032	19.2
	1968	13,911,541	843,192	680,495	162,697	20.4
	1969	13,453,114	269,893	728,320	-458,427	18.5
	1970	13,003,378	279,017	728,753	-449,736	17.8
	1971	12,472,320	178,356	709,414	-531,058	17.6
	1972	11,945,000	182,875	710,195	-527,320	16.8
	1973	11,351,124	132,431	726,307	-593,876	15.6
	1974	11,273,113	635,968	713,979	-78,011	15.8
	1975	11,062,302	479,981	690,792	-210,811	16.0
	1976	10,858,348	477,044	680,998	-203,954	15.9
	1977	10,650,682	431,830	639,496	-207,666	16.7
	1978	10,151,516	199,024	698,190	-499,166	14.5
	1979	9,862,380	364,332	653,468	-289,136	15.1
	1980	9,517,351	221,350	566,379	-345,029	16.8
	1981	9,108,891	63,607	472,067	-408,460	19.3
	1982	9,961,026	1,163,084	310,949	852,135	32.0
	1983	9,757,636	96,453	299,843	-203,390	32.5
	1984	9,523,422	145,132	379,346	-234,214	25.1
	1985	9,065,960	-49,826	407,636	-457,462	22.2
	1986	9,091,941	385,174	359,193	25,981	25.3
	1987	4,946,583	-3,921,454	223,904	-4,145,358	22.1
	1988	3,834,970	-944,274	167,339	-1,111,613	22.9
Total (1963-1988)		—	2,703,433	14,283,292	-11,579,859	—
Percent Change		-75.1	—	-73.6	—	—
Kentucky						
	1963	1,027,086	0	66,165	0	15.5
	1964	1,054,272	97,736	70,550	27,186	14.9
	1965	1,049,127	72,540	77,685	-5,145	13.5
	1966	1,033,140	65,006	80,993	-15,987	12.8
	1967	1,062,492	114,865	85,513	29,352	12.4
	1968	1,023,815	52,279	90,956	-38,677	11.3
	1969	952,167	2,145	73,793	-71,648	12.9
	1970	952,523	68,860	68,504	356	13.9
	1971	946,960	59,061	64,624	-5,563	14.7
	1972	535,127	-343,665	68,168	-411,833	7.9
	1973	505,612	34,716	64,231	-29,515	7.9
	1974	481,124	40,670	65,158	-24,488	7.4
	1975	453,776	35,933	63,281	-27,348	7.2
	1976	471,498	79,093	61,371	17,722	7.7
	1977	437,199	27,070	61,369	-34,299	7.1
	1978	397,996	11,387	50,590	-39,203	7.9
	1979	429,890	72,753	40,859	31,894	10.5
	1980	374,922	-7,413	47,555	-54,968	7.9
	1981	406,165	81,285	50,042	31,243	8.1
	1982	417,357	49,719	38,527	11,192	10.8
	1983	429,596	44,900	32,661	12,239	13.2
	1984	438,036	55,678	47,238	8,440	9.3
	1985	633,523	240,945	45,458	195,487	13.9
	1986	703,237	113,583	43,869	69,714	16.0
	1987	703,294	46,461	46,404	57	15.2
	1988	671,686	16,070	47,678	-31,608	14.1
Total (1963-1988)		—	1,131,677	1,487,077	-355,400	—
Percent Change		-34.6	—	-27.9	—	—
Louisiana						
	1963	71,660,292	0	3,232,917	0	22.2
	1964	70,930,073	2,756,029	3,486,248	-730,219	20.3
	1965	73,485,800	6,240,087	3,684,360	2,555,727	19.9
	1966	74,304,553	4,916,468	4,097,715	818,753	18.1

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Louisiana						
	1967	73,249,558	3,373,110	4,428,105	-1,054,995	16.5
	1968	72,383,868	3,975,226	4,840,916	-865,690	15.0
	1969	73,305,862	6,378,285	5,456,291	921,994	13.4
	1970	69,731,821	2,401,855	5,975,896	-3,574,041	11.7
	1971	63,895,982	213,889	6,049,728	-5,835,839	10.6
	1972	61,490,159	4,147,411	6,553,234	-2,405,823	9.4
	1973	53,715,078	-1,729,838	6,045,243	-7,775,081	8.9
	1974	47,835,241	-82,278	5,787,559	-5,879,837	8.3
	1975	40,449,235	-1,908,293	5,477,713	-7,386,006	7.4
	1976	36,510,313	1,369,878	5,308,800	-3,938,922	6.9
	1977	34,363,814	3,012,665	5,159,164	-2,146,499	6.7
	1978	33,004,924	3,787,824	5,146,714	-1,358,890	6.4
	1979	32,431,872	4,637,139	5,210,191	-573,052	6.2
	1980	31,209,323	3,938,655	5,161,204	-1,222,549	6.0
	1981	29,522,380	3,577,534	5,264,477	-1,686,943	5.6
	1982	28,184,859	3,421,905	4,759,426	-1,337,521	5.9
	1983	26,246,763	2,093,480	4,031,576	-1,938,096	6.5
	1984	24,230,485	2,546,400	4,562,678	-2,016,278	5.3
	1985	21,598,097	961,199	3,593,587	-2,632,388	6.0
	1986	19,570,383	1,025,358	3,053,072	-2,027,714	6.4
	1987	15,434,292	-1,630,818	2,505,273	-4,136,091	6.2
	1988	11,689,297	-1,518,138	2,226,857	-3,744,995	5.2
Total (1963-1988)		—	57,905,032	117,876,027	-59,970,995	—
Percent Change		-83.7	—	-31.1	—	—
Northern Louisiana						
	1963	5,111,996	0	509,312	0	10.0
	1964	4,966,615	392,070	537,451	-145,381	9.2
	1965	4,747,032	267,238	486,821	-219,583	9.8
	1966	4,485,006	212,329	474,355	-262,026	9.5
	1967	4,190,003	162,050	457,053	-295,003	9.2
	1968	3,709,615	-52,900	427,488	-480,388	8.7
	1969	3,460,367	161,250	410,498	-249,248	8.4
	1970	2,932,506	-145,171	382,690	-527,861	7.7
	1971	2,452,292	-185,338	314,876	-480,214	7.8
	1972	2,347,550	219,040	323,782	-104,742	7.3
	1973	2,030,616	-29,112	287,822	-316,934	7.1
	1974	1,758,235	-13,165	259,216	-272,381	6.8
	1975	1,524,887	-18,104	215,244	-233,348	7.1
	1976	1,565,816	243,940	203,011	40,929	7.7
	1977	1,517,543	137,389	185,662	-48,273	8.2
	1978	1,430,633	142,820	229,730	-86,910	6.2
	1979	1,429,924	184,165	184,874	-709	7.7
	1980	1,378,395	153,305	204,834	-51,529	6.7
	1981	1,965,194	810,868	224,069	586,799	8.8
	1982	2,168,026	428,107	225,275	202,832	9.6
	1983	2,231,416	270,570	207,180	63,390	10.8
	1984	2,152,622	161,153	239,947	-78,794	9.0
	1985	1,887,476	-19,038	246,108	-265,146	7.7
	1986	1,556,594	-101,554	229,328	-330,882	6.8
	1987	1,368,610	-37,607	150,377	-187,984	9.1
	1988	1,216,031	-7,094	145,485	-152,579	8.4
Total (1963-1988)		—	3,357,211	7,253,176	-3,895,965	—
Percent Change		-76.2	—	-71.4	—	—
Southern Louisiana Onshore						
	1963	48,126,622	0	2,087,078	0	23.1
	1964	46,791,437	914,862	2,250,047	-1,335,185	20.8
	1965	46,674,930	2,283,000	2,399,507	-116,507	19.5
	1966	45,060,005	1,030,378	2,625,303	-1,594,925	17.2
	1967	41,945,173	-443,269	2,691,563	-3,134,832	15.6
	1968	39,509,326	518,956	2,954,803	-2,435,847	13.4
	1969	36,968,231	656,421	3,197,516	-2,541,095	11.6
	1970	32,964,091	-775,971	3,228,169	-4,004,140	10.2

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)
(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Southern Louisiana Onshore						
	1971	29,351,594	-465,352	3,147,145	-3,612,497	9.3
	1972	27,051,383	1,145,557	3,445,768	-2,300,211	7.9
	1973	21,182,567	-3,127,949	2,740,867	-5,868,816	7.7
	1974	19,014,294	268,589	2,436,862	-2,168,273	7.8
	1975	16,297,476	-765,911	1,950,907	-2,716,818	8.4
	1976	13,238,160	-1,398,671	1,660,845	-3,059,316	8.0
	1977	10,350,722	-1,399,828	1,487,610	-2,887,438	7.0
	1978	8,791,456	-2,476,380	1,082,886	-3,559,266	6.3
	1979	6,256,936	369,176	903,696	-534,520	6.9
	1980	6,219,172	808,935	846,699	-37,764	7.3
	1981	6,118,337	918,173	1,019,008	-100,835	6.0
	1982	5,625,036	392,469	885,770	-493,301	6.4
	1983	4,926,449	25,886	724,473	-698,587	6.8
	1984	4,542,069	393,195	777,575	-384,380	5.8
	1985	3,659,210	-308,976	573,883	-882,859	6.4
	1986	3,781,353	550,310	428,167	122,143	8.8
	1987	2,994,045	-377,137	410,171	-787,308	7.3
	1988	2,184,550	-477,267	332,228	-809,495	6.6
Total (1963-1988)		—	-1,740,804	44,201,268	-45,942,072	—
Percent Change		-95.5	—	-84.1	—	—
Southern Louisiana Warranty[c]						
	1981	1,464,489	1,704,742	240,253	1,464,489	6.1
	1982	1,234,976	0	229,513	-229,513	5.4
	1983	1,014,042	0	220,934	-220,934	4.6
	1984	794,166	0	219,876	-219,876	3.6
	1985	617,447	4,666	181,385	-176,719	3.4
	1986	426,718	-2,012	188,717	-190,729	2.3
	1987	269,442	0	157,276	-157,276	1.7
	1988	117,376	0	152,066	-152,066	.8
Total (1963-1988)		—	1,707,396	1,590,020	117,376	—
Percent Change		-92.0	—	-36.7	—	—
Southern Louisiana Offshore						
	1963	18,421,674	0	636,527	0	28.9
	1964	19,172,021	1,449,097	698,750	750,347	27.4
	1965	22,063,838	3,689,845	798,032	2,891,817	27.6
	1966	24,739,542	3,673,761	998,057	2,675,704	24.8
	1967	27,114,382	3,654,329	1,279,489	2,374,840	21.2
	1968	29,164,927	3,509,170	1,458,625	2,050,545	20.0
	1969	32,877,264	5,560,614	1,848,277	3,712,337	17.8
	1970	33,835,224	3,322,997	2,365,037	957,960	14.3
	1971	32,092,096	844,579	2,587,707	-1,743,128	12.4
	1972	32,091,226	2,782,814	2,783,684	-870	11.5
	1973	30,501,895	1,427,223	3,016,554	-1,589,331	10.1
	1974	27,062,712	-337,702	3,101,481	-3,439,183	8.7
	1975	22,626,872	-1,124,278	3,311,562	-4,435,840	6.8
	1976	21,706,337	2,524,609	3,445,144	-920,535	6.3
	1977	22,495,549	4,275,104	3,485,892	789,212	6.5
	1978	24,782,835	6,121,384	3,834,098	2,287,286	6.5
	1979	24,745,012	4,083,798	4,121,621	-37,823	6.0
	1980	23,611,756	2,976,415	4,109,671	-1,133,256	5.7
	1981	19,974,360	143,751	3,781,147	-3,637,396	5.3
	1982	19,156,821	2,601,329	3,418,868	-817,539	5.6
	1983	18,074,856	1,797,024	2,878,989	-1,081,965	6.3
	1984	16,741,628	1,992,052	3,325,280	-1,333,228	5.0
	1985	15,433,964	1,284,547	2,592,211	-1,307,664	6.0
	1986	13,805,718	578,614	2,206,860	-1,628,246	6.3
	1987	10,802,195	-1,216,074	1,787,449	-3,003,523	6.0
	1988	8,171,340	-1,033,777	1,597,078	-2,630,855	5.1
Total (1963-1988)		—	54,581,229	64,831,563	-10,250,334	—
Percent Change		-55.6	—	150.9	—	—

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)
(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Maryland						
	1970	3,771	4,011	240	3,771	15.7
	1971	3,271	-282	218	-500	15.0
	1972	3,027	0	244	-244	12.4
	1973	2,716	-9	302	-311	9.0
	1974	2,639	61	138	-77	19.1
	1975	968	-1,575	96	-1,671	10.1
	1976	611	-278	79	-357	7.7
	1977	582	56	85	-29	6.8
	1978	879	395	98	297	9.0
	1979	825	25	79	-54	10.4
	1980	899	145	71	74	12.7
	1981	141,060	140,220	59	140,161	2,390.8
	1982	142,694	1,671	37	1,634	3,856.6
	1983	137,128	-5,535	31	-5,566	4,423.5
	1984	145,479	8,411	60	8,351	2,424.7
	1985	134,643	24,780	35,616	-10,836	3.8
	1986	129,695	-4,926	22	-4,948	5,895.2
	1987	43,549	-86,101	45	-86,146	967.8
	1988	40,210	68,156	71,495	-3,339	.6
Total (1963-1988)		—	149,225	109,015	40,210	—
Percent Change		966.3	—	29,689.6	—	—
Massachusetts						
	1987	0	15,547	15,547	0	.0
	1988	0	16,523	16,523	0	.0
Total (1963-1988)		—	32,070	32,070	—	—
Percent Change		—	—	6.3	—	—
Michigan						
	1982	201,262	201,262	0	201,262	.0
	1983	156,871	-44,391	0	-44,391	.0
	1984	168,989	12,118	0	12,118	.0
	1985	158,644	-10,345	0	-10,345	.0
	1986	153,690	-4,954	0	-4,954	.0
	1987	152,754	780	1,716	-936	89.0
	1988	140,245	-5,659	6,850	-12,509	20.5
Total (1963-1988)		—	148,811	8,566	140,245	—
Percent Change		-30.3	—	—	—	—
Minnesota						
	1984	0	3,335	3,335	0	.0
Total (1963-1988)		—	3,335	3,335	—	—
Percent Change		—	—	-100.0	—	—
Mississippi						
	1963	1,914,258	0	157,428	0	12.2
	1964	1,786,481	15,475	143,252	-127,777	12.5
	1965	1,227,967	-429,155	129,359	-558,514	9.5
	1966	1,298,576	204,700	134,091	70,609	9.7
	1967	1,239,900	60,025	118,701	-58,676	10.4
	1968	1,099,883	-11,810	128,207	-140,017	8.6
	1969	1,000,511	25,179	124,551	-99,372	8.0
	1970	828,217	-56,210	116,084	-172,294	7.1
	1971	692,896	-33,699	101,622	-135,321	6.8
	1972	514,097	-102,520	76,279	-178,799	6.7
	1973	437,457	-3,945	72,695	-76,640	6.0
	1974	303,511	-69,895	64,051	-133,946	4.7
	1975	272,866	14,334	44,979	-30,645	6.1
	1976	229,333	81	43,614	-43,533	5.3
	1977	296,402	126,448	59,379	67,069	5.0

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Mississippi						
	1978	625,273	390,361	61,490	328,871	10.2
	1979	740,686	219,103	103,690	115,413	7.1
	1980	807,922	179,069	111,833	67,236	7.2
	1981	803,928	121,092	125,086	-3,994	6.4
	1982	1,052,462	372,120	123,586	248,534	8.5
	1983	911,426	-5,978	135,058	-141,036	6.7
	1984	743,691	-25,226	142,509	-167,735	5.2
	1985	544,877	-89,830	108,984	-198,814	5.0
	1986	514,494	79,844	110,227	-30,383	4.7
	1987	495,782	117,595	136,307	-18,712	3.6
	1988	413,975	52,947	134,754	-81,807	3.1
Total (1963-1988)		—	1,150,105	2,650,388	-1,500,283	—
Percent Change		-78.4	—	-14.4	—	—
Montana						
	1963	209,731	0	4,583	0	45.8
	1964	215,928	11,016	4,819	6,197	44.8
	1965	234,251	23,357	5,034	18,323	46.5
	1966	241,337	11,707	4,621	7,086	52.2
	1967	248,832	11,447	3,952	7,495	63.0
	1968	302,851	57,943	3,924	54,019	77.2
	1969	305,464	11,401	8,788	2,613	34.8
	1970	298,364	519	7,619	-7,100	39.2
	1971	280,690	-13,908	3,766	-17,674	74.5
	1972	816,075	544,111	8,726	535,385	93.5
	1973	785,860	-14,502	15,713	-30,215	50.0
	1974	832,798	76,660	29,722	46,938	28.0
	1975	828,878	21,633	25,553	-3,920	32.4
	1976	797,800	-4,477	26,601	-31,078	30.0
	1977	704,318	-70,050	23,432	-93,482	30.1
	1978	901,994	220,866	23,190	197,676	38.9
	1979	923,985	58,899	36,908	21,991	25.0
	1980	757,417	-136,110	30,458	-166,568	24.9
	1981	763,171	39,455	33,701	5,754	22.6
	1982	723,238	-8,091	31,842	-39,933	22.7
	1983	686,411	-5,169	31,658	-36,827	21.7
	1984	675,055	12,995	24,351	-11,356	27.7
	1985	608,416	-48,618	18,021	-66,639	33.8
	1986	648,104	59,839	20,151	39,688	32.2
	1987	481,372	-151,701	15,031	-166,732	32.0
	1988	447,594	-12,798	20,980	-33,778	21.3
Total (1963-1988)		—	696,424	458,561	237,863	—
Percent Change		113.4	—	357.8	—	—
Nebraska						
	1963	66,136	0	9,040	0	7.3
	1964	60,200	1,535	7,471	-5,936	8.1
	1965	58,950	6,080	7,330	-1,250	8.0
	1966	82,550	31,650	8,050	23,600	10.3
	1967	77,039	1,878	7,389	-5,511	10.4
	1968	69,893	-237	6,909	-7,146	10.1
	1969	58,081	-5,767	6,045	-11,812	9.6
	1970	54,293	1,966	5,754	-3,788	9.4
	1971	54,789	5,428	4,932	496	11.1
	1972	64,903	15,044	4,930	10,114	13.2
	1973	67,830	7,716	4,789	2,927	14.2
	1974	76,643	13,484	4,671	8,813	16.4
	1975	74,375	1,555	3,823	-2,268	19.5
	1976	66,889	-3,657	3,829	-7,486	17.5
	1977	70,535	9,012	5,366	3,646	13.1
	1978	79,538	12,568	3,565	9,003	22.3
	1979	87,650	11,757	3,645	8,112	24.0
	1980	91,065	6,737	3,322	3,415	27.4
	1981	97,454	9,950	3,561	6,389	27.4

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)
(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Nebraska						
	1982	85,561	-8,949	2,944	-11,893	29.1
	1983	83,027	470	3,004	-2,534	27.6
	1984	91,353	11,873	3,547	8,326	25.8
	1985	91,149	787	991	-204	92.0
	1986	94,263	3,884	770	3,114	122.4
	1987	89,904	-3,798	561	-4,359	160.3
	1988	89,574	71	401	-330	223.4
Total (1963-1988)		--	131,037	107,599	23,438	--
Percent Change		35.4	--	-95.6	--	--
New Mexico						
	1963	19,517,863	0	614,152	0	31.8
	1964	19,190,056	355,182	682,989	-327,807	28.1
	1965	19,951,936	1,487,558	725,678	761,880	27.5
	1966	20,052,828	903,660	802,768	100,892	25.0
	1967	19,342,751	124,229	834,306	-710,077	23.2
	1968	18,919,609	514,187	937,329	-423,142	20.2
	1969	18,146,139	134,596	908,066	-773,470	20.0
	1970	17,308,112	88,253	926,280	-838,027	18.7
	1971	16,529,510	189,141	967,743	-778,602	17.1
	1972	15,997,299	497,052	1,029,263	-532,211	15.5
	1973	15,363,261	381,980	1,016,018	-634,038	15.1
	1974	14,475,058	134,787	1,022,990	-888,203	14.1
	1975	13,884,786	394,221	984,493	-590,272	14.1
	1976	13,354,680	457,297	987,403	-530,106	13.5
	1977	12,433,347	-9,447	911,886	-921,333	13.6
	1978	13,320,812	1,842,384	954,919	887,465	13.9
	1979	14,997,264	2,646,288	969,836	1,676,452	15.5
	1980	14,805,420	744,461	936,305	-191,844	15.8
	1981	15,296,716	1,494,459	1,003,163	491,296	15.2
	1982	14,806,070	316,078	806,724	-490,646	18.4
	1983	14,298,086	205,175	713,159	-507,984	20.0
	1984	13,759,477	197,607	736,216	-538,609	18.7
	1985	13,405,856	386,088	739,709	-353,621	18.1
	1986	13,157,863	235,946	483,939	-247,993	27.2
	1987	11,796,116	-833,310	528,437	-1,361,747	22.3
	1988	7,278,632	-4,203,244	314,040	-4,517,284	23.2
Total (1963-1988)		--	8,684,628	20,923,659	-12,239,031	--
Percent Change		-62.7	--	-48.9	--	--
New Mexico San Juan Basin						
	1963	13,997,950	0	301,770	0	46.4
	1964	13,671,671	229,861	356,140	-126,279	39.0
	1965	13,892,254	420,626	400,045	20,583	34.7
	1966	13,872,853	424,557	443,958	-19,401	31.2
	1967	13,581,350	178,452	469,955	-291,503	28.9
	1968	13,249,352	188,431	520,429	-331,998	25.5
	1969	12,886,976	111,614	473,990	-362,376	27.2
	1970	12,266,900	-151,176	468,900	-620,076	26.2
	1971	11,591,500	-180,400	495,000	-675,400	23.4
	1972	11,582,500	523,600	532,600	-9,000	21.7
	1973	11,303,775	208,334	487,059	-278,725	23.2
	1974	10,545,647	-278,486	479,642	-758,128	22.0
	1975	9,832,030	-285,550	428,067	-713,617	23.0
	1976	10,152,752	787,212	466,490	320,722	21.8
	1977	9,305,892	-414,343	432,517	-846,860	21.5
	1978	10,024,879	1,195,012	476,025	718,987	21.1
	1979	11,800,229	2,270,115	494,765	1,775,350	23.9
	1980	11,700,459	404,405	504,175	-99,770	23.2
	1981	11,687,319	491,983	505,123	-13,140	23.1
	1982	11,469,966	163,635	380,988	-217,353	30.1
	1983	11,139,052	-496	330,418	-330,914	33.7
	1984	10,702,241	-89,632	347,179	-436,811	30.8
	1985	10,434,121	118,815	386,935	-268,120	27.0

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)
(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
New Mexico San Juan Basin						
	1986	10,335,239	115,521	214,403	-98,882	48.2
	1987	9,581,706	-453,141	300,392	-753,533	31.9
	1988	6,043,982	-3,364,501	173,223	-3,537,724	34.9
Total (1963-1988)		—	2,614,450	10,568,418	-7,953,968	—
Percent Change		-56.8	—	-42.6	—	—
New Mexico Permian Basin						
	1963	5,519,913	0	312,382	0	17.7
	1964	5,318,385	125,321	326,849	-201,528	16.3
	1965	6,059,682	1,066,930	325,633	741,297	18.6
	1966	6,179,975	479,103	358,810	120,293	17.2
	1967	5,761,401	-54,223	364,351	-418,574	15.8
	1968	5,670,257	325,756	416,900	-91,144	13.6
	1969	5,259,163	22,982	434,076	-411,094	12.1
	1970	5,041,212	239,429	457,380	-217,951	11.0
	1971	4,938,010	369,541	472,743	-103,202	10.4
	1972	4,414,799	-26,548	496,663	-523,211	8.9
	1973	4,059,486	173,646	528,959	-355,313	7.7
	1974	3,929,411	413,273	543,348	-130,075	7.2
	1975	4,052,756	679,771	556,426	123,345	7.3
	1976	3,201,928	-329,915	520,913	-850,828	6.1
	1977	3,127,455	404,896	479,369	-74,473	6.5
	1978	3,295,933	647,372	478,894	168,478	6.9
	1979	3,197,035	376,173	475,071	-98,898	6.7
	1980	3,104,961	340,056	432,130	-92,074	7.2
	1981	3,609,397	1,002,476	498,040	504,436	7.2
	1982	3,336,104	152,443	425,736	-273,293	7.8
	1983	3,159,034	205,671	382,741	-177,070	8.3
	1984	3,057,236	287,239	389,037	-101,798	7.9
	1985	2,971,735	267,273	352,774	-85,501	8.4
	1986	2,822,624	120,425	269,536	-149,111	10.5
	1987	2,214,410	-380,169	228,045	-608,214	9.7
	1988	1,234,850	-838,743	140,817	-979,560	8.8
Total (1963-1988)		—	6,070,178	10,355,241	-4,285,063	—
Percent Change		-77.6	—	-54.9	—	—
New York						
	1963	9,772	0	1,136	0	8.6
	1964	4,979	-3,737	1,056	-4,793	4.7
	1965	4,478	833	1,334	-501	3.4
	1966	4,625	1,053	906	147	5.1
	1967	3,947	-10	668	-678	5.9
	1968	3,671	287	563	-276	6.5
	1969	3,070	54	655	-601	4.7
	1970	4,084	1,626	612	1,014	6.7
	1971	3,391	-89	604	-693	5.6
	1972	22,833	21,131	1,689	19,442	13.5
	1973	16,281	-4,508	2,044	-6,552	8.0
	1974	27,166	13,526	2,641	10,885	10.3
	1975	29,940	6,773	3,999	2,774	7.5
	1976	33,516	6,705	3,129	3,576	10.7
	1977	25,716	-5,700	2,100	-7,800	12.2
	1978	21,970	-1,934	1,812	-3,746	12.1
	1979	24,465	7,880	5,385	2,495	4.5
	1980	37,077	15,341	2,729	12,612	13.6
	1981	69,940	41,469	8,606	32,863	8.1
	1982	107,155	45,382	8,167	37,215	13.1
	1983	195,241	97,273	9,187	88,086	21.3
	1984	193,062	12,189	14,368	-2,179	13.4
	1985	201,565	48,624	40,121	8,503	5.0
	1986	218,658	48,388	31,295	17,093	7.0
	1987	208,436	26,535	36,757	-10,222	5.7
	1988	169,239	-12,552	26,645	-39,197	6.4

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)
(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
New York						
Total (1963-1988)		—	366,539	207,072	159,467	—
Percent Change		1,631.9	—	2,245.5	—	—
North Dakota						
	1963	545,064	0	19,694	0	27.7
	1964	524,295	0	20,769	-20,769	25.2
	1965	464,064	-40,571	19,660	-60,231	23.6
	1966	443,705	0	20,359	-20,359	21.8
	1967	423,900	1	19,806	-19,805	21.4
	1968	264,393	-140,823	18,684	-159,507	14.2
	1969	247,596	936	17,733	-16,797	14.0
	1970	213,159	-17,404	17,033	-34,437	12.5
	1971	193,496	-4,590	15,073	-19,663	12.8
	1972	178,107	-4,961	10,428	-15,389	17.1
	1973	261,163	97,267	14,211	83,056	18.4
	1974	252,690	3,060	11,533	-8,473	21.9
	1975	239,120	-1,820	11,750	-13,570	20.4
	1976	226,939	-2,263	9,918	-12,181	22.9
	1977	223,150	7,013	10,802	-3,789	20.7
	1978	230,772	18,825	11,203	7,622	20.6
	1979	219,435	2,831	14,168	-11,337	15.5
	1980	309,369	109,037	19,103	89,934	16.2
	1981	293,944	6,965	22,390	-15,425	13.1
	1982	291,490	23,542	25,996	-2,454	11.2
	1983	236,101	-22,555	32,834	-55,389	7.2
	1984	231,981	14,147	18,267	-4,120	12.7
	1985	279,356	69,022	21,647	47,375	12.9
	1986	287,913	29,767	21,210	8,557	13.6
	1987	138,327	-132,852	16,734	-149,586	8.3
	1988	45,520	-76,632	16,175	-92,807	2.8
Total (1963-1988)		—	-62,058	437,486	-499,544	—
Percent Change		-91.6	—	-17.9	—	—
Ohio						
	1963	131,968	0	22,815	0	5.8
	1964	103,271	-7,693	21,004	-28,697	4.9
	1965	89,145	6,782	20,908	-14,126	4.3
	1966	80,323	13,220	22,042	-8,822	3.6
	1967	72,024	11,540	19,839	-8,299	3.6
	1968	96,334	43,079	18,769	24,310	5.1
	1969	109,648	39,592	26,278	13,314	4.2
	1970	156,179	76,767	30,236	46,531	5.2
	1971	157,926	31,384	29,637	1,747	5.3
	1972	174,394	46,311	29,843	16,468	5.8
	1973	201,255	55,761	28,900	26,861	7.0
	1974	215,228	43,199	29,226	13,973	7.4
	1975	196,010	7,446	26,664	-19,218	7.4
	1976	168,636	-1,830	25,544	-27,374	6.6
	1977	147,133	3,056	24,559	-21,503	6.0
	1978	142,472	18,758	23,419	-4,661	6.1
	1979	148,271	30,921	25,122	5,799	5.9
	1980	194,231	80,990	35,030	45,960	5.5
	1981	220,481	67,428	41,178	26,250	5.4
	1982	362,612	191,895	49,764	142,131	7.3
	1983	400,079	95,120	57,652	37,467	6.9
	1984	401,352	55,040	53,767	1,273	7.5
	1985	319,312	-8,177	73,863	-82,040	4.3
	1986	377,925	87,012	28,399	58,613	13.3
	1987	380,257	22,287	19,955	2,332	19.1
	1988	293,096	-70,413	16,748	-87,161	17.5
Total (1963-1988)		—	939,475	778,347	161,128	—
Percent Change		122.1	—	-26.6	—	—

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)
(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Oklahoma						
	1963	13,807,958	0	692,612	0	19.9
	1964	14,154,497	1,152,836	806,297	346,539	17.6
	1965	14,273,119	973,673	855,051	118,622	16.7
	1966	14,851,336	1,538,041	959,824	578,217	15.5
	1967	15,105,087	1,285,640	1,031,889	253,751	14.6
	1968	15,072,380	1,065,536	1,097,743	-32,207	13.7
	1969	14,580,628	707,404	1,199,656	-492,252	12.2
	1970	14,022,418	692,154	1,250,364	-558,210	11.2
	1971	12,682,297	-129,632	1,210,489	-1,340,121	10.5
	1972	11,498,788	2,917	1,186,426	-1,183,509	9.7
	1973	10,359,298	-35,432	1,104,058	-1,139,490	9.4
	1974	9,388,829	107,037	1,077,506	-970,469	8.7
	1975	8,510,250	113,909	992,488	-878,579	8.6
	1976	7,889,565	298,957	919,642	-620,685	8.6
	1977	7,390,731	367,144	865,978	-498,834	8.5
	1978	7,796,285	1,263,118	857,564	405,554	9.1
	1979	8,207,915	1,356,252	944,622	411,630	8.7
	1980	9,125,085	1,871,008	953,838	917,170	9.6
	1981	8,577,060	453,113	1,001,138	-548,025	8.6
	1982	10,230,428	2,771,389	1,118,021	1,653,368	9.2
	1983	9,777,234	434,919	888,113	-453,194	11.0
	1984	9,233,423	442,557	986,368	-543,311	9.4
	1985	8,535,118	126,561	824,866	-698,305	10.3
	1986	7,688,206	-155,382	691,530	-846,912	11.1
	1987	6,396,899	-711,925	579,382	-1,291,307	11.0
	1988	4,779,706	-1,105,196	511,997	-1,617,193	9.3
Total (1963-1988)		—	14,886,598	23,914,850	-9,028,252	—
Percent Change		-65.4	—	-26.1	—	—
Pennsylvania						
	1963	609,800	0	48,890	0	12.5
	1964	582,136	13,284	40,948	-27,664	14.2
	1965	607,753	64,395	38,778	25,617	15.7
	1966	603,948	39,793	43,596	-3,805	13.9
	1967	566,853	7,771	44,866	-37,095	12.6
	1968	379,842	-147,107	39,904	-187,011	9.5
	1969	344,087	508	36,263	-35,755	9.5
	1970	327,220	18,942	35,809	-16,867	9.1
	1971	343,509	47,472	31,183	16,289	11.0
	1972	326,747	16,974	33,736	-16,762	9.7
	1973	363,144	70,912	34,515	36,397	10.5
	1974	364,107	37,200	36,237	963	10.0
	1975	384,814	54,622	33,915	20,707	11.3
	1976	396,715	46,227	34,326	11,901	11.6
	1977	426,408	58,308	28,615	29,693	14.9
	1978	433,449	39,174	32,133	7,041	13.5
	1979	468,244	63,832	29,037	34,795	16.1
	1980	590,176	163,780	41,848	121,932	14.1
	1981	823,579	295,615	62,212	233,403	13.2
	1982	967,329	216,403	72,653	143,750	13.3
	1983	985,277	83,540	65,592	17,948	15.0
	1984	964,914	47,350	67,713	-20,363	14.3
	1985	909,153	13,399	69,160	-55,761	13.1
	1986	934,124	82,868	57,897	24,971	16.1
	1987	978,336	96,347	52,135	44,212	18.8
	1988	888,883	-41,042	48,411	-89,453	18.4
Total (1963-1988)		—	1,390,567	1,111,484	279,083	—
Percent Change		45.8	—	-1.0	—	—
South Dakota						
	1978	6,000	6,000	0	6,000	.0
	1979	7,758	2,600	842	1,758	9.2
	1980	8,490	1,850	1,118	732	7.6
	1981	15,420	8,098	1,168	6,930	13.2

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
South Dakota						
	1982	14,952	1,394	1,862	-468	8.0
	1983	13,651	2	1,303	-1,301	10.5
	1984	11,637	-1,197	817	-2,014	14.2
	1985	10,082	-626	929	-1,555	10.9
	1986	9,162	-244	676	-920	13.6
	1987	6,969	-1,692	501	-2,193	13.9
	1988	3,607	-2,817	545	-3,362	6.6
Total (1963-1988)		—	13,368	9,761	3,607	--
Percent Change		-39.9	—	--	—	—
Tennessee						
	1968	250	252	2	250	125.0
	1969	10	-237	3	-240	3.3
	1970	10	0	0	0	.0
	1973	1,615	1,605	0	1,605	.0
	1974	2,497	882	0	882	.0
	1975	2,497	0	0	0	.0
	1976	2,497	0	0	0	.0
	1981	26	-2,439	32	-2,471	.8
	1982	8,878	9,136	284	8,852	31.3
	1983	7,648	2,583	3,813	-1,230	2.0
	1984	5,415	1,804	4,037	-2,233	1.3
	1985	11,800	10,462	4,077	6,385	2.9
	1986	8,734	0	3,066	-3,066	2.8
	1987	18,925	13,186	2,995	10,191	6.3
	1988	16,270	0	2,655	-2,655	6.1
Total (1963-1988)		—	37,234	20,964	16,270	--
Percent Change		6,406.0	—	132,650.0	—	—
Texas						
	1963	52,668,983	0	3,222,919	0	16.3
	1964	53,651,366	4,358,367	3,375,984	982,383	15.9
	1965	53,503,297	3,288,494	3,436,563	-148,069	15.6
	1966	55,184,451	5,205,077	3,523,923	1,681,154	15.7
	1967	56,470,413	4,800,784	3,514,822	1,285,962	16.1
	1968	55,010,407	2,150,518	3,610,524	-1,460,006	15.2
	1969	49,067,574	-2,213,970	3,728,863	-5,942,833	13.2
	1970	41,361,659	-3,821,924	3,883,991	-7,705,915	10.6
	1971	37,990,952	425,130	3,795,837	-3,370,707	10.0
	1972	32,637,487	-1,619,684	3,733,781	-5,353,465	8.7
	1973	28,651,862	-409,068	3,576,557	-3,985,625	8.0
	1974	25,139,850	-164,180	3,347,832	-3,512,012	7.5
	1975	20,360,237	-1,819,122	2,960,491	-4,779,613	6.9
	1976	17,567,503	-161,163	2,631,571	-2,792,734	6.7
	1977	16,127,735	979,002	2,418,770	-1,439,768	6.7
	1978	17,255,431	3,412,507	2,284,811	1,127,696	7.6
	1979	17,977,739	3,472,299	2,749,991	722,308	6.5
	1980	17,409,917	2,313,909	2,881,731	-567,822	6.0
	1981	18,573,606	4,177,514	3,013,825	1,163,689	6.2
	1982	17,387,220	1,537,468	2,723,854	-1,186,386	6.4
	1983	16,723,718	1,750,991	2,414,493	-663,502	6.9
	1984	15,968,545	1,800,706	2,555,879	-755,173	6.2
	1985	15,538,082	1,666,205	2,096,668	-430,463	7.4
	1986	14,510,512	858,804	1,886,374	-1,027,570	7.7
	1987	11,859,135	-1,003,058	1,648,319	-2,651,377	7.2
	1988	8,073,055	-2,324,185	1,461,895	-3,786,080	5.5
Total (1963-1988)		—	28,661,421	73,257,349	-44,595,928	—
Percent Change		-84.7	—	-54.6	—	—

Note: Footnotes appear at the end of the table.

Table C. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Texas Railroad District No. 1 (North)						
	1963	63,361	0	3,869	0	16.4
	1964	54,662	-3,840	5,079	-8,719	10.8
	1965	56,138	5,238	3,762	1,476	14.9
	1966	52,619	-141	3,378	-3,519	15.6
	1967	49,253	-503	2,863	-3,366	17.2
	1968	45,572	-715	2,966	-3,681	15.4
	1969	44,199	1,685	3,058	-1,373	14.5
	1970	40,777	-11	3,411	-3,422	12.0
	1971	39,070	2,573	4,280	-1,707	9.1
	1972	39,623	3,364	2,811	553	14.1
	1973	36,141	313	3,795	-3,482	9.5
	1974	45,495	13,157	3,803	9,354	12.0
	1975	41,021	-332	4,142	-4,474	9.9
	1976	37,043	-240	3,738	-3,978	9.9
	1977	34,204	478	3,317	-2,839	10.3
	1978	36,595	5,709	3,318	2,391	11.0
	1979	39,851	6,254	2,998	3,256	13.3
	1980	16,159	-19,911	3,781	-23,692	4.3
	1981	32,780	23,236	6,615	16,621	5.0
	1982	32,151	3,124	3,753	-629	8.6
	1983	28,344	-2,370	1,437	-3,807	19.7
	1984	27,769	875	1,450	-575	19.2
	1985	17,024	-9,584	1,161	-10,745	14.7
	1986	16,208	243	1,059	-816	15.3
	1987	2,847	-13,118	243	-13,361	11.7
	1988	2,330	-317	200	-517	11.7
Total (1963-1988)		—	15,367	76,418	-61,051	—
Percent Change		-96.3	—	-94.8	—	—
Texas Railroad District No. 1 (South)						
	1963	1,685,227	0	68,838	0	24.5
	1964	1,580,749	-35,962	68,516	-104,478	23.1
	1965	588,192	-931,344	61,213	-992,557	9.6
	1966	541,094	11,795	58,893	-47,098	9.2
	1967	503,339	9,543	47,298	-37,755	10.6
	1968	405,252	-58,695	39,392	-98,087	10.3
	1969	337,857	-34,624	32,771	-67,395	10.3
	1970	278,516	-23,399	35,942	-59,341	7.7
	1971	166,831	-77,589	34,096	-111,685	4.9
	1972	134,839	-2,239	29,754	-31,992	4.5
	1973	181,110	78,509	32,238	46,271	5.6
	1974	162,894	27,514	45,730	-18,216	3.6
	1975	145,024	19,340	37,210	-17,870	3.9
	1976	143,572	35,165	36,617	-1,452	3.9
	1977	130,993	23,577	36,156	-12,579	3.6
	1978	130,948	35,425	35,470	-45	3.7
	1979	148,979	47,794	29,763	18,031	5.0
	1980	121,388	1,696	29,287	-27,591	4.1
	1981	168,163	74,056	27,281	46,775	6.2
	1982	133,668	-5,596	28,899	-34,495	4.6
	1983	97,765	-11,272	24,631	-35,903	4.0
	1984	99,745	27,246	25,266	1,980	3.9
	1985	95,611	18,042	22,176	-4,134	4.3
	1986	116,302	36,728	16,037	20,691	7.3
	1987	75,864	-20,132	20,306	-40,438	3.7
	1988	113,096	66,348	29,116	37,232	3.9
Total (1963-1988)		—	-688,073	884,058	-1,572,131	—
Percent Change		-93.3	—	-57.7	—	—
Texas Railroad District No. 2						
	1963	4,864,112	0	330,667	0	14.7
	1964	4,584,487	62,552	342,177	-279,625	13.4
	1965	4,076,858	-180,279	327,350	-507,629	12.5
	1966	3,466,305	-298,702	311,851	-610,553	11.1

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Texas Railroad District No. 2						
	1967	2,841,291	-360,124	264,890	-625,014	10.7
	1968	2,496,730	-99,472	245,089	-344,561	10.2
	1969	2,075,879	-188,320	232,531	-420,851	8.9
	1970	1,715,090	-166,748	194,041	-360,789	8.8
	1971	1,454,790	-76,816	183,484	-260,300	7.9
	1972	1,303,237	24,532	176,085	-151,553	7.4
	1973	1,110,733	-29,939	162,565	-192,504	6.8
	1974	898,492	-59,631	152,610	-212,241	5.9
	1975	677,575	-101,824	119,093	-220,917	5.7
	1976	573,164	3,847	108,258	-104,411	5.3
	1977	550,595	72,331	94,900	-22,569	5.8
	1978	578,619	112,842	84,818	28,024	6.8
	1979	716,626	226,283	88,276	138,007	8.1
	1980	661,009	50,105	105,722	-55,617	6.3
	1981	553,979	-2,762	104,268	-107,030	5.3
	1982	826,401	411,231	138,809	272,422	6.0
	1983	753,625	82,006	154,782	-72,776	4.9
	1984	704,025	157,586	207,186	-49,600	3.4
	1985	584,282	19,915	139,658	-119,743	4.2
	1986	410,993	-104,368	68,921	-173,289	6.0
	1987	365,766	29,779	75,006	-45,227	4.9
	1988	292,531	-21,456	51,779	-73,235	5.6
Total (1963-1988)		—	-437,432	4,134,149	-4,571,581	—
Percent Change		-94.0	—	-84.3	—	—
Texas Railroad District No. 3						
	1963	5,078,311	0	387,472	0	13.1
	1964	4,977,012	280,602	381,901	-101,299	13.0
	1965	4,505,727	-78,387	392,898	-471,285	11.5
	1966	4,083,560	-29,797	392,370	-422,167	10.4
	1967	3,711,985	-2,806	368,769	-371,575	10.1
	1968	2,765,198	-586,301	360,486	-946,787	7.7
	1969	2,403,337	-24,434	337,427	-361,861	7.1
	1970	1,981,142	-108,115	314,080	-422,195	6.3
	1971	1,671,560	-46,353	263,229	-309,582	6.4
	1972	1,173,380	-218,758	279,422	-498,180	4.2
	1973	987,425	3,890	189,845	-185,955	5.2
	1974	892,577	56,488	151,336	-94,848	5.9
	1975	767,343	8,565	133,799	-125,234	5.7
	1976	587,611	-52,635	127,097	-179,732	4.6
	1977	475,893	-11,676	100,042	-111,718	4.8
	1978	542,900	148,901	81,894	67,007	6.6
	1979	588,421	171,902	126,381	45,521	4.7
	1980	539,006	42,920	92,335	-49,415	5.8
	1981	574,549	161,432	125,889	35,543	4.6
	1982	486,274	16,283	104,558	-88,275	4.7
	1983	418,175	13,855	81,954	-68,099	5.1
	1984	327,633	-23,499	67,043	-90,542	4.9
	1985	457,868	209,443	79,208	130,235	5.8
	1986	451,948	47,760	53,680	-5,920	8.4
	1987	229,798	-176,674	45,476	-222,150	5.1
	1988	154,176	-41,158	34,464	-75,622	4.5
Total (1963-1988)		—	-238,552	4,685,583	-4,924,135	—
Percent Change		-97.0	—	-91.1	—	—
Texas Railroad District No. 4						
	1963	11,212,220	0	652,194	0	17.2
	1964	11,878,975	1,343,910	677,155	666,755	17.5
	1965	12,556,777	1,398,834	721,032	677,802	17.4
	1966	11,606,704	-195,249	754,824	-950,073	15.4
	1967	12,470,267	1,645,773	782,210	863,563	15.9
	1968	11,459,632	-212,318	798,317	-1,010,635	14.4
	1969	10,140,480	-521,612	797,540	-1,319,152	12.7
	1970	8,493,310	-826,647	820,523	-1,647,170	10.4

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Texas Railroad District No. 4						
	1971	7,802,139	111,923	803,094	-691,171	9.7
	1972	6,284,407	-763,031	754,701	-1,517,732	8.3
	1973	5,850,371	269,928	703,964	-434,036	8.3
	1974	4,921,859	-309,209	619,303	-928,512	7.9
	1975	3,638,375	-803,868	479,616	-1,283,484	7.6
	1976	3,028,432	-200,661	409,282	-609,943	7.4
	1977	2,398,730	-258,942	370,760	-629,702	6.5
	1978	2,392,194	285,213	291,749	-6,536	8.2
	1979	2,302,138	222,881	312,937	-90,056	7.4
	1980	2,344,940	340,609	297,807	42,802	7.9
	1981	2,370,791	503,024	477,173	25,851	5.0
	1982	1,973,087	-120,979	276,725	-397,704	7.1
	1983	1,750,306	30,670	253,451	-222,781	6.9
	1984	1,640,337	168,568	278,537	-109,969	5.9
	1985	1,330,192	-110,632	199,513	-310,145	6.7
	1986	1,139,345	29,454	220,301	-190,847	[illegible]
	1987	952,396	-11,230	175,719	-186,949	5.4
	1988	669,620	-113,936	168,840	-282,776	4.0
Total (1963-1988)		--	1,902,473	12,445,073	-10,542,600	--
Percent Change		-94.0	--	-74.1	--	--
Texas Railroad District No. 5						
	1963	34,202	0	2,133	0	16.0
	1964	33,221	556	1,537	-981	21.6
	1965	32,721	784	1,284	-500	25.5
	1966	31,558	232	1,395	-1,163	22.6
	1967	22,518	-7,597	1,443	-9,040	15.6
	1968	26,395	5,496	1,619	3,877	16.3
	1969	8,968	-15,761	1,666	-17,427	5.4
	1970	6,707	17	2,278	-2,261	2.9
	1971	38,535	34,329	2,501	31,828	15.4
	1972	35,196	-27	3,312	-3,339	10.6
	1973	31,322	-137	3,737	-3,874	8.4
	1974	27,841	13	3,494	-3,481	8.0
	1975	24,355	-18	3,468	-3,486	7.0
	1976	22,087	394	2,662	-2,268	8.3
	1977	20,133	40	1,994	-1,954	10.1
	1978	18,582	12	1,563	-1,551	11.9
	1979	14,767	-614	3,201	-3,815	4.6
	1980	13,186	4,197	5,778	-1,581	2.3
	1981	9,273	1,921	5,834	-3,913	1.6
	1982	13,943	10,603	5,933	4,670	2.4
	1983	11,582	2,156	4,517	-2,361	2.6
	1984	7,256	-1,612	2,714	-4,326	2.7
	1985	10,956	6,337	2,637	3,700	4.2
	1986	1,022	-9,512	422	-9,934	2.4
	1987	2,280	1,939	681	1,258	3.3
	1988	1,347	-538	395	-933	3.4
Total (1963-1988)		--	33,210	66,065	-32,855	--
Percent Change		-96.1	--	-81.5	--	--
Texas Railroad District No. 6						
	1963	2,302,290	0	348,576	0	6.6
	1964	2,393,834	402,050	310,506	91,544	7.7
	1965	2,287,227	209,534	316,141	-106,607	7.2
	1966	2,170,335	182,765	299,657	-116,892	7.2
	1967	1,959,820	67,585	278,100	-210,515	7.0
	1968	1,918,234	206,960	248,546	-41,586	7.7
	1969	1,675,753	-25,754	216,727	-242,481	7.7
	1970	1,381,608	-102,963	191,182	-294,145	7.2
	1971	1,177,681	-42,852	161,075	-203,927	7.3
	1972	1,056,438	39,036	160,279	-121,243	6.6
	1973	948,767	36,715	144,386	-107,671	6.6
	1974	968,931	149,928	129,764	20,164	7.5

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Texas Railroad District No. 6						
	1975	830,569	-17,369	120,993	-138,362	6.9
	1976	727,440	8,555	111,684	-103,129	6.5
	1977	759,362	138,431	106,509	31,922	7.1
	1978	818,502	173,334	114,194	59,140	7.2
	1979	1,078,943	475,678	215,237	260,441	5.0
	1980	1,317,391	557,647	319,199	238,448	4.1
	1981	1,399,147	277,348	195,592	81,756	7.2
	1982	1,511,970	297,423	184,600	112,823	8.2
	1983	1,507,849	142,305	146,427	-4,121	10.3
	1984	1,521,843	184,434	180,440	13,994	8.4
	1985	1,514,788	148,775	155,830	-7,055	9.7
	1986	1,379,371	-8,928	126,489	-135,417	10.9
	1987	1,302,640	39,527	116,258	-76,731	11.2
	1988	965,946	-225,263	111,431	-336,694	8.7
Total (1963-1988)		—	3,324,902	4,661,246	-1,336,344	—
Percent Change		-58.0	—	-68.0	—	—
Texas Railroad District No. 7B						
	1963	46,547	0	7,109	0	6.5
	1964	45,314	5,908	7,141	-1,233	6.3
	1965	39,198	1,540	7,656	-6,116	5.1
	1966	52,435	20,195	6,958	13,237	7.5
	1967	46,429	0	6,006	-6,006	7.7
	1968	43,084	2,486	5,831	-3,345	7.4
	1969	39,537	0	3,547	-3,547	11.1
	1970	44,678	8,017	2,876	5,141	15.5
	1971	34,609	-7,952	2,117	-10,069	16.3
	1972	90,366	57,928	2,171	55,757	41.6
	1973	10,401	-78,666	1,299	-79,965	8.0
	1974	5,226	-4,055	1,120	-5,175	4.7
	1975	4,301	131	1,056	-925	4.1
	1976	3,341	1	961	-960	3.5
	1977	4,253	1,572	660	912	6.4
	1978	11,664	8,769	1,358	7,411	8.6
	1979	23,826	14,319	2,157	12,162	11.0
	1980	17,869	-2,183	3,774	-5,957	4.7
	1981	1,424	-16,245	200	-16,445	7.1
	1982	2,222	1,322	524	798	4.2
	1983	709	-1,275	238	-1,513	3.0
	1984	551	8	166	-158	3.3
	1985	3,598	3,821	774	3,047	4.6
	1986	76,957	75,135	1,776	73,359	43.3
	1987	59,694	28,953	46,216	-17,263	1.3
	1988	107,491	129,632	81,835	47,797	1.3
Total (1963-1988)		—	249,361	188,417	60,944	—
Percent Change		130.9	—	1,051.1	—	—
Texas Railroad District No. 7C						
	1963	2,472,362	0	110,295	0	22.4
	1964	2,857,648	517,049	131,783	385,266	21.7
	1965	2,985,879	262,582	134,351	128,231	22.2
	1966	2,308,580	-548,683	130,616	-677,299	17.7
	1967	2,946,912	785,732	147,400	638,332	20.0
	1968	3,124,124	318,004	140,792	177,212	22.2
	1969	2,703,781	-247,831	172,512	-420,343	15.7
	1970	2,598,989	60,884	165,676	-104,792	15.7
	1971	2,581,063	155,988	173,914	-17,926	14.8
	1972	2,224,834	-184,186	172,043	-356,229	12.9
	1973	1,902,703	-131,885	190,246	-322,131	10.0
	1974	1,688,005	-29,761	184,937	-214,698	9.1
	1975	1,263,312	-266,822	157,871	-424,693	8.0
	1976	1,001,709	-116,137	145,466	-261,603	6.9
	1977	948,468	76,693	129,934	-53,241	7.3
	1978	977,921	151,101	121,648	29,453	8.0

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Texas Railroad District No. 7C						
	1979	1,049,200	187,881	116,602	71,279	9.0
	1980	1,140,264	245,739	154,675	91,064	7.4
	1981	1,104,298	111,940	147,906	-35,966	7.5
	1982	1,107,419	132,631	129,510	3,121	8.6
	1983	1,040,536	59,403	126,286	-66,883	8.2
	1984	1,084,896	174,005	129,645	44,360	8.4
	1985	1,119,482	159,062	124,476	34,586	9.0
	1986	964,681	-63,420	91,381	-154,801	10.6
	1987	876,742	4,395	92,334	-87,939	9.5
	1988	329,957	-503,025	43,760	-546,785	7.5
Total (1963-1988)		—	1,313,339	3,455,744	-2,142,405	—
Percent Change		-86.7	—	-60.3	—	—
Texas Railroad District No. 8						
	1963	9,307,062	0	433,608	0	21.5
	1964	10,466,423	1,697,182	537,821	1,159,361	19.5
	1965	12,612,665	2,690,437	544,195	2,146,242	23.2
	1966	16,675,277	4,647,381	584,769	4,062,612	28.5
	1967	18,237,218	2,272,559	610,618	1,661,941	30.0
	1968	19,526,445	1,987,392	798,165	1,189,227	24.5
	1969	16,655,299	-1,914,642	956,504	-2,871,146	17.4
	1970	13,160,109	-2,419,893	1,075,297	-3,495,190	12.2
	1971	12,307,312	249,934	1,102,731	-852,797	11.2
	1972	10,636,582	-596,964	1,073,766	-1,670,730	9.9
	1973	9,063,723	-538,353	1,034,506	-1,572,859	8.8
	1974	7,737,050	-375,102	951,571	-1,326,673	8.1
	1975	6,098,158	-744,767	894,125	-1,638,892	6.8
	1976	5,333,500	1,601	766,259	-764,658	7.0
	1977	4,691,436	36,497	678,561	-642,064	6.9
	1978	4,160,889	76,042	606,589	-530,547	6.9
	1979	3,800,865	219,048	579,072	-360,024	6.6
	1980	3,397,492	128,390	531,763	-403,373	6.4
	1981	3,152,297	225,322	470,517	-245,195	6.7
	1982	3,069,367	315,821	398,751	-82,930	7.7
	1983	2,998,872	234,121	304,616	-70,495	9.8
	1984	2,971,901	271,110	298,081	-26,971	10.0
	1985	3,188,313	482,128	265,716	216,412	12.0
	1986	2,818,641	-149,479	220,193	-369,672	12.8
	1987	1,985,892	-656,452	176,297	-832,749	11.3
	1988	782,113	-1,113,635	90,144	-1,203,779	8.7
Total (1963-1988)		—	7,025,678	15,550,627	-8,524,949	—
Percent Change		-91.6	—	-79.2	—	—
Texas Railroad District No. 8A						
	1963	1,506,890	0	53,062	0	28.4
	1964	1,098,497	-361,208	47,185	-408,393	23.3
	1965	1,047,394	-718	50,385	-51,103	20.8
	1966	1,924,988	943,815	66,221	877,594	29.1
	1967	1,848,157	345	77,176	-76,831	23.9
	1968	1,768,569	5,109	84,697	-79,588	20.9
	1969	1,725,684	42,314	85,199	-42,885	20.3
	1970	1,317,343	-303,809	104,532	-408,341	12.6
	1971	1,047,531	-180,712	89,100	-269,812	11.8
	1972	687,155	-293,010	67,366	-360,376	10.2
	1973	355,474	-273,086	58,593	-331,681	6.1
	1974	285,944	-25,631	43,899	-69,530	6.5
	1975	171,171	-78,676	36,097	-114,773	4.7
	1976	130,967	-8,239	31,965	-40,204	4.1
	1977	133,215	35,316	33,068	2,248	4.0
	1978	146,323	46,039	32,931	13,108	4.4
	1979	136,502	22,677	33,498	-10,821	4.0
	1980	96,133	-12,949	26,420	-39,369	3.6
	1981	78,265	4,119	21,987	-17,868	3.6
	1982	82,150	21,576	17,691	3,885	4.6

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P* Ratio
Texas Railroad District No. 8A						
	1983	63,149	-5,242	13,759	-19,001	4.6
	1984	59,228	7,620	11,541	-3,921	5.1
	1985	40,258	-8,951	10,019	-18,970	4.0
	1986	59,040	34,171	15,389	18,782	3.8
	1987	84,844	38,700	12,896	25,804	6.6
	1988	29,688	-51,928	3,228	-55,156	9.2
Total (1963-1988)		—	-402,360	1,074,842	-1,477,202	—
Percent Change		-98.0	—	-93.9	—	—
Texas Railroad District No. 9						
	1963	730,680	0	50,049	0	14.6
	1964	856,565	176,470	50,585	125,885	16.9
	1965	842,926	44,562	58,201	-13,639	14.5
	1966	769,617	-9,290	64,019	-73,309	12.0
	1967	772,830	63,740	60,527	3,213	12.8
	1968	731,594	18,640	59,876	-41,236	12.2
	1969	672,513	923	60,004	-59,081	11.2
	1970	609,226	652	63,939	-63,287	9.5
	1971	577,872	30,556	61,910	-31,354	9.3
	1972	524,353	3,808	57,327	-53,519	9.1
	1973	474,048	303	50,608	-50,305	9.4
	1974	383,584	-42,073	48,391	-90,464	7.9
	1975	367,565	31,066	47,085	-16,019	7.8
	1976	328,703	4,263	43,125	-38,862	7.6
	1977	292,597	490	36,596	-36,106	8.0
	1978	258,859	-437	33,301	-33,738	7.8
	1979	276,694	52,342	34,507	17,835	8.0
	1980	286,510	50,076	40,260	9,816	7.1
	1981	280,476	37,849	43,883	-6,034	6.4
	1982	244,544	12,774	48,706	-35,932	5.0
	1983	241,344	41,999	45,199	-3,200	5.3
	1984	231,054	36,975	47,265	-10,290	4.9
	1985	253,709	76,227	53,572	22,655	4.7
	1986	254,398	52,380	51,691	689	4.9
	1987	214,128	-7,350	32,920	-40,270	6.5
	1988	142,371	-40,531	31,226	-71,757	4.6
Total (1963-1988)		—	636,414	1,224,723	-588,309	—
Percent Change		-80.5	—	-37.6	—	—
Texas Railroad District No. 10						
	1963	13,385,699	0	775,047	0	17.2
	1964	12,823,979	272,898	814,618	-541,720	15.7
	1965	11,871,595	-134,289	818,095	-952,384	14.5
	1966	11,501,379	478,756	848,972	-370,216	13.5
	1967	10,960,394	326,537	867,522	-540,985	12.6
	1968	10,699,578	563,932	824,748	-260,816	13.0
	1969	10,483,715	613,104	828,967	-215,863	12.6
	1970	9,639,025	57,251	901,941	-844,690	10.7
	1971	8,839,048	100,981	900,958	-799,977	9.8
	1972	8,101,237	191,027	928,838	-737,811	8.7
	1973	7,307,506	153,244	946,975	-793,731	7.7
	1974	6,805,151	436,466	938,821	-502,355	7.2
	1975	6,104,396	172,023	872,778	-700,755	7.0
	1976	5,456,164	149,091	797,323	-648,232	6.8
	1977	5,019,649	322,805	759,320	-436,515	6.6
	1978	5,189,211	829,516	659,954	169,562	7.9
	1979	4,860,985	332,109	660,355	-328,246	7.4
	1980	4,446,590	214,785	629,160	-414,375	7.1
	1981	5,066,667	1,280,275	658,198	622,077	7.7
	1982	3,843,035	-721,936	503,696	-1,225,632	7.6
	1983	3,622,812	176,213	396,436	-220,223	9.1
	1984	3,304,859	70,932	388,885	-317,953	8.5
	1985	3,026,876	45,284	323,267	-277,983	9.4
	1986	2,858,693	90,396	258,579	-168,183	11.1

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)
(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Texas Railroad District No. 10						
	1987	2,390,873	-263,142	204,678	-467,820	11.7
	1988	1,678,385	-534,463	178,025	-712,488	9.4
Total (1963-1988)		—	5,223,795	16,911,109	-11,687,314	—
Percent Change		-87.4	—	-77.0	—	—
Texas Offshore						
	1969	100,572	100,982	410	100,572	245.3
	1970	95,139	2,840	8,273	-5,433	11.5
	1971	252,911	171,120	13,348	157,772	18.9
	1972	345,840	118,835	25,906	92,929	13.3
	1973	392,138	100,098	53,800	46,298	7.3
	1974	316,801	-2,284	73,053	-75,337	4.3
	1975	227,072	-36,571	53,158	-89,729	4.3
	1976	193,770	13,832	47,134	-33,302	4.1
	1977	668,207	541,390	66,953	474,437	10.0
	1978	1,992,224	1,540,041	216,024	1,324,017	9.2
	1979	2,940,962	1,493,745	545,007	948,738	5.4
	1980	3,011,980	712,788	641,770	71,018	4.7
	1981	3,779,497	1,495,999	728,482	767,517	5.2
	1982	4,060,989	1,163,191	881,699	281,492	4.6
	1983	4,188,650	988,421	860,760	127,661	4.9
	1984	3,987,448	716,458	917,660	-201,202	4.3
	1985	3,895,125	626,338	718,661	-92,323	5.4
	1986	3,962,913	828,244	760,456	67,788	5.2
	1987	3,315,371	1,747	649,289	-647,542	5.1
	1988	2,804,004	126,085	637,452	-511,367	4.4
Total (1963-1988)		—	10,703,299	7,899,295	2,804,004	—
Percent Change		2,688.1	—	155,376.1	—	—
Utah						
	1963	321,082	0	40,161	0	8.0
	1964	344,280	54,802	31,604	23,198	10.9
	1965	378,386	65,596	31,490	34,106	12.0
	1966	385,028	39,585	32,943	6,642	11.7
	1967	348,855	-9,714	26,459	-36,173	13.2
	1968	332,613	8,201	24,443	-16,242	13.6
	1969	260,830	-50,962	20,821	-71,783	12.5
	1970	251,661	15,981	25,150	-9,169	10.0
	1971	264,659	34,744	21,746	12,998	12.2
	1972	296,473	53,382	21,568	31,814	13.7
	1973	307,805	35,602	24,270	11,332	12.7
	1974	306,853	27,592	28,544	-952	10.8
	1975	304,929	28,251	30,175	-1,924	10.1
	1976	252,143	-26,245	26,541	-52,786	9.5
	1977	290,901	71,160	32,402	38,758	9.0
	1978	382,198	129,505	38,208	91,297	10.0
	1979	533,170	192,491	41,519	150,972	12.8
	1980	716,243	233,063	49,990	183,073	14.3
	1981	858,299	205,593	63,537	142,056	13.5
	1982	1,001,035	213,591	70,855	142,736	14.1
	1983	932,750	-15,120	53,165	-68,285	17.5
	1984	870,143	-9,854	52,753	-62,607	16.5
	1985	849,903	32,685	52,925	-20,240	16.1
	1986	783,318	-29,351	37,234	-66,585	21.0
	1987	671,906	-81,573	29,839	-111,412	22.5
	1988	500,910	-143,908	27,088	-170,996	18.5
Total (1963-1988)		—	1,075,097	895,269	179,828	—
Percent Change		56.0	—	-32.6	—	—

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Virginia						
	1963	10,818	0	1,439	0	7.5
	1964	11,995	2,450	1,273	1,177	9.4
	1965	17,300	8,826	3,521	5,305	4.9
	1966	16,135	2,540	3,705	-1,165	4.4
	1967	17,491	4,519	3,163	1,356	5.5
	1968	21,102	6,418	2,807	3,611	7.5
	1969	19,552	811	2,361	-1,550	8.3
	1970	28,088	10,914	2,378	8,536	11.8
	1971	30,893	4,972	2,167	2,805	14.3
	1972	38,633	10,158	2,418	7,740	16.0
	1973	41,858	7,916	4,691	3,225	8.9
	1974	38,523	3,388	6,723	-3,335	5.7
	1975	41,014	8,897	6,406	2,491	6.4
	1976	40,993	6,667	6,688	-21	6.1
	1977	44,791	9,310	5,512	3,798	8.1
	1978	91,654	55,405	8,542	46,863	10.7
	1979	107,257	24,190	8,587	15,603	12.5
	1980	108,025	8,586	7,818	768	13.8
	1981	117,658	18,530	8,897	9,633	13.2
	1982	121,518	10,765	6,905	3,860	17.6
	1983	117,841	646	4,323	-3,677	27.3
	1984	112,864	3,999	8,976	-4,977	12.6
	1985	133,931	35,318	14,251	21,067	9.4
	1986	133,954	61,389	61,366	23	2.2
	1987	103,558	54,663	85,059	-30,396	1.2
	1988	145,233	57,667	15,992	41,675	9.1
Total (1963-1988)		—	418,944	284,529	134,415	—
Percent Change		1,242.5	—	1,011.3	—	—
Washington						
	1983	10,585	10,585	0	10,585	.0
	1984	12,527	1,942	0	1,942	.0
	1985	12,677	150	0	150	.0
	1986	13,765	1,088	0	1,088	.0
	1987	12,863	-902	0	-902	.0
	1988	5,416	-7,447	0	-7,447	.0
Total (1963-1988)		—	5,416	—	5,416	—
Percent Change		-48.8	—	—	—	—
West Virginia						
	1963	1,904,102	0	163,564	0	11.6
	1964	1,982,145	251,011	172,968	78,043	11.5
	1965	1,937,033	130,640	175,752	-45,112	11.0
	1966	1,985,145	223,450	175,338	48,112	11.3
	1967	1,925,401	119,518	179,262	-59,744	10.7
	1968	1,907,235	180,680	198,846	-18,166	9.6
	1969	1,844,741	126,882	189,376	-62,494	9.7
	1970	1,789,459	152,723	208,005	-55,282	8.6
	1971	1,749,714	161,223	200,968	-39,745	8.7
	1972	1,687,882	112,811	174,643	-61,832	9.7
	1973	1,644,881	107,560	150,561	-43,001	10.9
	1974	1,487,428	-11,610	145,843	-157,453	10.2
	1975	1,423,334	67,054	131,148	-64,094	10.9
	1976	1,478,789	187,832	132,377	55,455	11.2
	1977	1,459,026	110,649	130,412	-19,763	11.2
	1978	1,516,740	191,699	133,985	57,714	11.3
	1979	1,554,046	168,227	130,921	37,306	11.9
	1980	1,614,177	203,193	143,062	60,131	11.3
	1981	1,560,665	103,251	156,763	-53,512	10.0
	1982	1,549,207	136,055	147,513	-11,458	10.5
	1983	1,579,758	159,408	128,857	30,551	12.3
	1984	1,507,008	77,003	149,753	-72,750	10.1
	1985	1,563,159	212,687	156,536	56,151	10.0
	1986	1,661,216	230,657	132,600	98,057	12.5

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)
(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
West Virginia						
	1987	1,692,048	153,417	122,585	30,832	13.8
	1988	1,587,118	14,428	119,358	-104,930	13.3
Total (1963-1988)		--	3,570,448	3,887,432	-316,984	--
Percent Change		-16.6	--	-27.0	--	--
Wyoming						
	1963	4,191,587	0	154,532	0	27.1
	1964	4,315,618	311,227	187,196	124,031	23.1
	1965	4,398,703	270,816	187,731	83,085	23.4
	1966	4,496,114	282,733	185,322	97,411	24.3
	1967	4,473,545	162,245	184,814	-22,569	24.2
	1968	4,472,316	192,804	194,033	-1,229	23.0
	1969	4,471,936	213,841	214,221	-380	20.9
	1970	4,634,994	395,954	232,896	163,058	19.9
	1971	4,629,489	251,914	257,419	-5,505	18.0
	1972	4,419,235	59,588	269,842	-210,254	16.4
	1973	4,111,514	-42,233	265,488	-307,721	15.5
	1974	4,255,010	388,385	244,889	143,496	17.4
	1975	4,483,502	460,356	231,864	228,492	19.3
	1976	4,393,582	138,626	228,546	-89,920	19.2
	1977	4,332,088	185,664	247,158	-61,494	17.5
	1978	4,311,824	224,757	245,021	-20,264	17.6
	1979	4,964,675	952,176	299,325	652,851	16.6
	1980	5,421,861	777,667	320,481	457,186	16.9
	1981	6,104,153	1,026,511	344,219	682,292	17.7
	1982	6,293,437	526,918	337,634	189,284	18.6
	1983	6,064,062	123,296	352,671	-229,375	17.2
	1984	5,725,977	34,981	373,066	-338,085	15.3
	1985	5,746,707	383,651	362,921	20,730	15.8
	1986	5,256,093	-188,526	302,088	-490,614	17.4
	1987	4,286,895	-719,447	249,751	-969,198	17.2
	1988	3,452,276	-625,319	209,300	-834,619	16.5
Total (1963-1988)		--	5,788,585	6,527,896	-739,311	--
Percent Change		-17.6	--	35.4	--	--
Undifferentiated[b]						
	1963	2,327,067	0	175,815	0	13.2
	1964	2,682,769	565,836	210,134	355,702	12.8
	1965	2,448,355	-31,324	203,090	-234,414	12.1
	1966	2,484,792	240,387	203,950	36,437	12.2
	1967	2,398,272	133,215	219,735	-86,520	10.9
	1968	2,594,910	429,336	232,698	196,638	11.2
	1969	2,563,191	203,250	234,969	-31,719	10.9
	1970	1,673,519	-780,356	109,316	-889,672	15.3
	1971	1,733,454	364,621	304,686	59,935	5.7
	1972	248,619	-1,418,034	66,801	-1,484,835	3.7
	1973	60,246	-94,033	94,340	-188,373	.6
	1974	82,049	134,340	112,537	21,803	.7
	1975	62,636	15,060	34,473	-19,413	1.8
	1976	68,387	32,214	26,463	5,751	2.6
	1977	29,897	7,886	46,376	-38,490	.6
	1978	27,123	17,094	19,868	-2,774	1.4
	1981	1,667,849	1,640,726	0	1,640,726	.0
	1982	1,588,515	-79,334	0	-79,334	.0
	1983	1,386,099	-202,416	0	-202,416	.0
	1984	1,411,243	25,144	0	25,144	.0
	1985	1,342,752	-68,491	0	-68,491	.0
	1986	1,311,215	-31,537	0	-31,537	.0
	1987	1,259,390	-51,825	0	-51,825	.0
	1988	1,537,649	278,297	38	278,259	464.4
Total (1963-1988)		--	1,330,056	2,119,474	-789,418	--
Percent Change		-33.9	--	-100.0	--	--

Note: Footnotes appear at the end of the table.

Table 8. Dedicated Gas Reserves, Changes in Gas Reserves, Production and R/P Ratios, by State, 1963-1988 (Continued)

(Million Cubic Feet)

State	Year	Year-End Reserves	Revisions and Additions Gain or Loss	Annual Production	Net Change in Reserves Gain or Loss	R/P[a] Ratio
Total All Companies						
	1963	188,540,057	0	9,350,628	0	20.2
	1964	189,165,424	10,639,942	10,014,575	625,367	18.9
	1965	191,899,705	13,105,056	10,370,775	2,734,281	18.5
	1966	195,130,322	14,367,183	11,136,566	3,230,617	17.5
	1967	194,391,527	10,858,254	11,597,049	-738,795	16.8
	1968	191,473,968	9,398,880	12,316,439	-2,917,559	15.5
	1969	184,165,368	5,882,915	13,191,515	-7,308,600	14.0
	1970	170,382,751	68,494	13,851,111	-13,782,617	12.3
	1971	158,681,804	2,284,002	13,984,949	-11,700,947	11.3
	1972	146,905,647	2,430,780	14,206,937	-11,776,157	10.3
	1973	132,374,965	-1,032,400	13,498,282	-14,530,682	9.8
	1974	120,542,602	1,132,687	12,965,050	-11,832,363	9.3
	1975	106,816,456	-1,734,398	11,991,748	-13,726,146	8.9
	1976	98,282,085	2,854,237	11,388,608	-8,534,371	8.6
	1977	92,888,736	5,527,300	10,920,649	-5,393,349	8.5
	1978	93,993,187	11,969,929	10,865,478	1,104,451	8.7
	1979	97,299,098	14,841,878	11,535,967	3,305,911	8.4
	1980	97,102,021	11,407,195	11,604,272	-197,077	8.4
	1981	98,339,488	13,196,777	11,959,310	1,237,467	8.2
	1982	98,710,561	11,304,485	10,933,412	371,073	9.0
	1983	94,497,523	5,283,864	9,496,902	-4,213,038	10.0
	1984	89,893,676	5,817,778	10,421,625	-4,603,847	8.6
	1985	85,101,967	4,126,042	8,917,751	-4,791,709	9.5
	1986	80,601,606	3,077,975	7,578,336	-4,500,361	10.6
	1987	65,135,136	-8,811,454	6,655,016	-15,466,470	9.8
	1988	48,791,559	-10,539,422	5,804,155	-16,343,577	8.4
Total (1963-1988)		—	137,457,979	277,206,477	-139,748,498	—
Percent Change		-74.1	—	-37.9	—	—

[a] R/P = Reserves to Production.
[b] Reserves and Production which are not separable by FERC Production Areas or by States. Includes undesignated underground storage beginning in 1981.
[c] Warranty data prior to 1981 is not available.
— = Not Applicable.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Domestic Natural Gas Supplies of Major Jurisdictional Companies

Sixty respondents, consisting of 25 major[2] and 35 minor companies from the universe of 79 respondents, reported owned or contracted domestic natural gas reserves and production for 1988. The remaining 19 respondents reporting on Form 15 purchased their entire gas supply from another respondent or foreign supplier or purchased supplemental supplies including coal gas, LNG, and SNG (Table 13). Such supplies are not included in the domestic natural gas total.

The 25 major companies collectively accounted for 94.3 percent (46.0 trillion cubic feet) of the total domestic natural gas reserves and 91.4 percent (5.3 trillion cubic feet) of the total production reported by interstate pipeline companies for 1988. The balance of domestic natural gas reserves and production, 2.8 and 0.5 trillion cubic feet respectively, was reported by the 35 minor companies (Table 9).

Annual production and purchases for the major companies indicate a decline from a high of 13.9 in 1971 and 1972 to 5.3 in 1988. Statistics also reveal a declining trend in reserves from 194.1 trillion cubic feet in 1967 to 46.0 trillion cubic feet in 1988 (Table 10).

The ratio of gross change in reserves to production for the 25 major companies in 1988 was -2.1 compared to -1.5 in 1987. A ratio less than 1 indicates a decrease in year-end reserves from the preceding year (Table 11).

[2]Major companies are those having over 900 billion cubic feet of domestic in-the-ground reserves at the inception of the Form 15 report or date of first filing of the form. Some of the major companies no longer have domestic in-the-ground reserves of over 900 billion cubic feet, but are still classified as such to preserve continuity of data.

Table 9. Domestic Gas Reserves, Production, and Purchases, Year-End 1988

(Billion Cubic Feet)

Item	Major Companies[a]	Minor Companies	Total
Number of Companies	25	35	60
Reserves Dedicated as of December 31,1988 :			
Pipeline-owned Reserves	5,654	401	6,055
Reserves Dedicated Under Independent Producer Contracts	40,167	2,129	42,296
Other Supply Contracts[b]	178	247	425
Total	45,999	2,777	48,776
Percent of Total Dedicated Reserves	94.3	5.7	100.0
Production From Dedicated Reserves During 1987 :			
Pipeline-owned	174	19	193
Dedicated Under Independent Producer Contracts	4,937	422	5,358
Other Supply Contracts[b]	152	58	209
Total	5,263	498	5,760
Percent of Total Production	91.4	8.6	100.0

[a] Major companies are those having over 900 billion cubic feet of domestic in-the-ground reserves at the inception of the Form 15 report or date of first filing of the form. Some of the major companies no longer have domestic in-the-ground reserves of over 900 billion cubic feet but are still classified as such to preserve continuity of data.

[b] Includes intrastate supplies pursuant to Section 311(b) and 312 of the NGPA of 1978.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 10. Domestic Reserves, Production, and Purchases of Major Gas Supply Companies,[a] 1963-1988

(Trillion Cubic Feet)

Year	Number of Companies	Annual Production and Purchases	Year-End Gas Reserves
1963	24	9.0	184.6
1964	24	9.7	185.0
1965	23	10.0	187.6
1966	24	10.8	190.0
1967	24	11.5	194.1
1968	24	12.2	191.3
1969	24	13.1	184.2
1970	25	13.8	170.1
1971	25	13.9	158.1
1972	25	13.9	144.2
1973	25	13.4	131.9
1974	26	12.7	118.3
1975	26	11.7	104.7
1976	26	11.1	96.4
1977	26	10.7	91.1
1978	26	10.7	92.2
1979	26	11.3	95.1
1980	26	11.4	95.2
1981	25	11.6	95.2
1982	25	10.6	95.5
1983	25	9.2	91.4
1984	25	10.1	87.0
1985	25	8.5	82.0
1986	25	7.1	77.6
1987	25	6.1	62.2
1988	25	5.3	46.0

[a] Major companies are those having over 900 billion cubic feet of domestic in-the-ground reserves at the inception of the Form 15 report or date of first filing of the form. Some of the major companies no longer have domestic in-the-ground reserves of over 900 billion cubic feet, but are still classified as such to preserve continuity of data.

Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 11. Gross Change in Reserves, Production, and Gross-Change Production (GC/P) Ratios of Major Companies

(Million Cubic Feet)

Major Gas Company	Year-End Reserves		Annual Gross Change in Reserves[a] Year-End Increase or Decrease					Total Change 12-31-83 to 12-31-88
	1987	1988	1984	1985	1986	1987	1988	
ANR Pipeline Co	2,893,142	1,809,148						
Gross Change in Reserves			80,713	843,030	223,709	-225,930	-424,134	497,388
Annual Production			499,403	413,561	303,334	181,567	183,517	1,581,382
GC/P Ratio			.16	2.04	.74	-1.24	-2.31	.31
Arkla Inc	4,414,246	3,606,557						
Gross Change in Reserves			126,546	35,244	91,608	99,628	315,761	668,787
Annual Production			275,710	274,105	270,704	319,634	336,323	1,476,476
GC/P Ratio			.46	.13	.34	.31	.94	.45
CNG Transmission Corp	1,597,296	1,346,171						
Gross Change in Reserves			112,607	93,624	123,413	-1,861	74,291	402,074
Annual Production			163,552	170,340	119,078	105,453	94,776	653,199
GC/P Ratio			.69	.55	1.04	-.02	.78	.62
Colorado Interstate Gas Co	3,185,534	2,427,812						
Gross Change in Reserves			16,859	-26,613	153,505	11,189	-67,829	87,111
Annual Production			239,819	181,043	153,549	148,900	121,522	844,833
GC/P Ratio			.07	-.15	.00	.08	-.56	.10
Columbia Gas Transmission Corp	4,934,516	4,424,721						
Gross Change in Reserves			379,695	443,911	1,063,272	83,995	4,633	1,975,506
Annual Production			604,394	556,990	530,928	399,779	393,210	2,485,301
GC/P Ratio			.63	.80	2.00	.21	.01	.79
El Paso Natural Gas Co	15,903,757	6,862,125						
Gross Change in Reserves			410,932	977,785	350,179	-1,606,577	-5,520,878	-5,388,559
Annual Production			985,475	1,007,396	686,372	686,867	286,963	3,653,073
GC/P Ratio			.42	.97	.51	-2.34	-9.24	-1.48
Florida Gas Transmission Co	976,131	679,272						
Gross Change in Reserves			201,143	199,866	292,491	151,424	15,120	860,044
Annual Production			243,708	206,019	207,219	250,220	249,737	1,156,903
GC/P Ratio			.83	.97	1.41	.61	.06	.74
K N Energy Inc	1,359,945	1,082,796						
Gross Change in Reserves			69,002	12,724	9,158	-32,571	49,686	107,999
Annual Production			90,346	82,205	70,408	64,081	78,108	385,148
GC/P Ratio			.76	.15	.13	-.51	.64	.28
Natural Gas Pipeline Co of America	5,318,128	1,433,090						
Gross Change in Reserves			743,842	664,471	87,692	-483,149	-2,242,616	-1,229,760
Annual Production			929,903	824,313	551,939	171,265	177,858	2,655,278
GC/P Ratio			.80	.81	.16	-2.82	-2.61	-.46
Northern Natural Div InterNorth Inc	6,802,390	1,506,592						
Gross Change in Reserves			256,908	-379,422	89,667	-1,929,590	-1,112,417	-3,074,854
Annual Production			608,061	507,392	434,303	364,218	306,970	2,220,944
GC/P Ratio			.42	-.75	.21	-5.30	-3.62	-1.38
Northwest Pipeline Corp	4,764,997	2,251,471						
Gross Change in Reserves			312,477	87,019	-491,844	-878,892	-904,453	-1,875,693
Annual Production			171,970	150,213	112,860	119,766	83,024	637,833
GC/P Ratio			1.82	.58	-4.36	-7.34	-.89	-2.94
Panhandle Eastern Pipe Line Co	4,264,450	1,448,421						
Gross Change in Reserves			98,630	-171,925	321,482	-1,370,586	-673,313	-1,795,712
Annual Production			355,769	259,041	225,585	122,664	57,258	1,020,317
GC/P Ratio			.28	-.66	1.43	-1.17	-1.76	-1.76
Sea Robin Pipeline Co	459,697	66,905						
Gross Change in Reserves			109,469	57,066	5,232	-176,903	-58,524	-63,660
Annual Production			137,160	101,380	59,859	27,412	3,321	329,132
GC/P Ratio			.80	.56	.09	-6.45	-7.62	-.19
Southern Natural Gas Co	2,364,825	1,437,045						
Gross Change in Reserves			95,273	127,668	114,322	177,926	194,468	709,659
Annual Production			429,864	321,110	306,144	301,515	278,806	1,637,439
GC/P Ratio			.22	.40	.37	.59	.70	.43

Note: Footnotes appear at the end of the table.

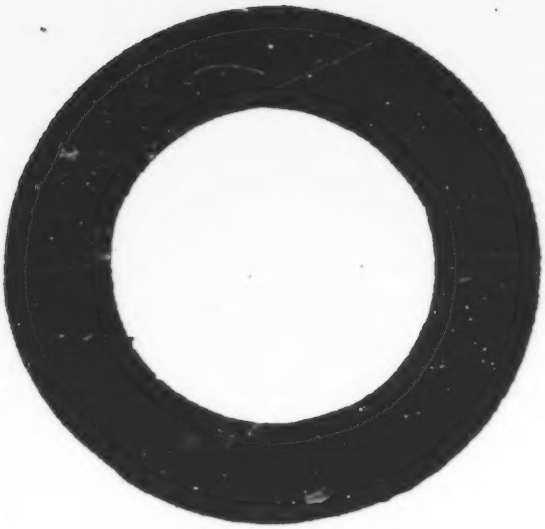
Table 11. Gross Change in Reserves, Production, and Gross-Change Production (GC/P) Ratios of Major Companies (Continued)
(Million Cubic Feet)

Major Gas Company	Year-End Reserves		Annual Gross Change in Reserves[a] Year-End Increase or Decrease					Total Change 12-31-83 to 12-31-88
	1983	1988	1984	1985	1986	1987	1988	
Tennessee Gas Pipeline Div Tenneco	7,447,635	3,451,448						
Gross Change in Reserves			314,812	-299,054	546,277	-831,264	-257,558	-526,787
Annual Production			1,063,466	570,785	593,312	685,345	556,492	3,469,400
GC/P Ratio			.30	-.52	.92	-1.21	-.46	-.15
Texas Eastern Transmission Corp	3,433,228	2,622,167						
Gross Change in Reserves			1,030,806	259,134	400,337	159,495	495,575	2,345,347
Annual Production			706,587	634,920	607,576	598,497	608,828	3,156,408
GC/P Ratio			1.46	.41	.66	.27	.81	.74
Texas Gas Transmission Corp	2,191,101	1,163,260						
Gross Change in Reserves			483,316	44,816	29,968	-137,890	-361,572	58,638
Annual Production			367,977	310,823	176,084	121,597	109,998	1,086,479
GC/P Ratio			1.31	.14	.17	-1.13	-3.29	.05
Transcontinental Gas Pipe Line Corp	5,967,766	2,934,365						
Gross Change in Reserves			402,082	61,854	180,424	271,369	168,876	1,084,605
Annual Production			832,558	763,306	881,757	835,067	805,318	4,118,006
GC/P Ratio			.48	.08	.20	.32	.21	.26
Transwestern Pipeline Co	1,623,433	961,555						
Gross Change in Reserves			206,570	372,303	-157,118	-85,998	-47,607	288,150
Annual Production			258,778	218,220	172,742	175,543	124,745	950,028
GC/P Ratio			.80	1.71	-.91	-.49	-.38	.30
Trunkline Gas Co	1,956,141	726,770						
Gross Change in Reserves			-83,011	7,012	-9,113	-31,767	-62,535	-179,414
Annual Production			280,456	213,676	215,937	170,951	168,937	1,049,957
GC/P Ratio			-.30	.03	-.04	-.19	-.37	-.17
United Gas Pipe Line Co	3,045,491	480,366						
Gross Change in Reserves			165,611	60,738	-777,953	-833,148	-29,037	-1,413,789
Annual Production			530,546	407,067	132,744	48,659	32,320	1,151,336
GC/P Ratio			.31	.15	-5.86	-7.12	-.90	-1.23
Valero Interstate Transmission Co	125,103	36,467						
Gross Change in Reserves			2,378	-33,446	35,577	17,356	-26,300	-4,435
Annual Production			21,196	11,483	12,979	18,695	19,848	84,201
GC/P Ratio			.11	-2.91	2.74	.93	-1.33	-.05
West Texas Gathering Co	69,364	13,324						
Gross Change in Reserves			254	8,475	5,864	5,011	-52,568	-32,964
Annual Production			7,645	11,411	2,151	1,278	591	23,076
GC/P Ratio			.03	.74	2.73	3.92	-8.95	-1.43
Williams Natural Gas Co	5,286,514	2,813,234						
Gross Change in Reserves			164,012	31,170	30,995	-1,300,083	-297,971	-1,371,877
Annual Production			235,851	259,024	261,543	191,093	153,892	1,101,403
GC/P Ratio			.70	.12	.12	-6.80	-1.94	-1.25
Williston Basin Interstate Pipeline	974,194	413,946						
Gross Change in Reserves			3,144	19,859	38,020	-310,835	-126,374	-376,186
Annual Production			43,665	40,795	40,324	28,945	30,333	184,062
GC/P Ratio			.07	.49	.94	-.74	-4.17	-2.04
Total	91,359,024	45,999,028						
Gross Change in Reserves			5,704,070	3,497,309	2,757,164	-9,259,649	-10,947,276	-8,248,382
Annual Production			10,083,859	8,496,618	7,129,431	6,139,011	5,262,695	37,111,614
GC/P Ratio			.57	.41	.39	-1.51	-2.08	-.22

[a] Gross change in reserves is the net change in reserves plus annual production. Interstate pipeline purchases, pipeline imports, coal gasification, liquefied natural gas, and synthetic natural gas are excluded.

Note: GC/P = Ratio of Gross Change to Production.

Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."



Total Gas Supplies of the Jurisdictional Interstate Pipeline Companies

The total gas supplies of interstate pipeline companies consist of the dedicated, salable natural gas available from company-owned in-the-ground reserves, including gas in underground storage, reserves dedicated to or warranted under contracts with independent producers, gas purchased under contracts with other interstate pipeline companies, intrastate supplies contracted pursuant to Section 311(b) and 312 of the Natural Gas Policy Act of 1978, domestically produced coal gas, LNG, SNG, and imported natural gas and LNG.

The total gas supplies of each interstate pipeline company controlling a share of the dedicated domestic reserves are shown in detail in Table 12. Table 13 provides an account of the gas supplies of interstate pipeline companies that purchased their entire gas supply from another respondent, foreign supplier, or other source constituting supplies not considered to be domestic in-the-ground reserves. Presentation of the data in two tables clearly distinguishes those companies reporting gas supplies considered to be additive to domestic in-the-ground reserves from companies reporting gas that is not considered to be additive.

A section of 20-inch natural gas pipeline crosses Lancaster County farmlands.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Major Gas Supply Companies				
ANR Pipeline Co				
Gas Reserves				
Company Owned	0	0.00	140,197	6.63
Producer Contracts	183,517	93.74	1,668,951	78.89
Subtotal	183,517	93.74	1,809,148	85.51
Domestic Gas Supply				
Interstate Pipeline Purchases				
Great Lakes Gas Transmission Co	0	.00	12,753	.60
Midwestern Gas Transmission Co	0	.00	172,025	8.13
Northern Natural Div InterNorth Inc	0	.00	51,494	2.43
Coal Gasification Purchases				
Dakota Gasification Co[a]	12,251	6.26	36,753	1.74
Subtotal	12,251	6.26	273,025	12.91
Import Gas Supply				
Pipeline Purchases				
Trans-Canada P L Ltd[a]	0	.00	33,450	1.58
Company Total Gas Supply	195,768	100.00	2,115,623	100.00
Arkla Inc				
Gas Reserves				
Company Owned	17,134	4.90	310,891	8.04
Producer Contracts	318,800	91.26	3,287,506	85.05
Subtotal	335,934	96.16	3,598,397	93.09
Domestic Gas Supply				
Interstate Pipeline Purchases				
Mississippi River Transmission Corp	3,191	.91	62,260	1.61
Natural Gas Pipeline Co of America	4	.00	100	.00
Tennessee Gas Pipeline Div Tenneco	66	.02	1,100	.03
Texas Eastern Transmission Corp	456	.13	8,520	.22
United Gas Pipe Line Co	1,190	.34	25,820	.67
Williams Natural Gas Co	172	.05	4,080	.11
Texas Gas Transmission Corp	7,948	2.28	156,920	4.06
Intrastate Pipeline Purchases				
Oneok Inc[a]	389	.11	8,160	.21
Subtotal	13,416	3.84	266,960	6.91
Company Total Gas Supply	349,350	100.00	3,865,357	100.00
CNG Transmission Corp[1]				
Gas Reserves				
Company Owned	20,063	8.62	496,133	3.89
Producer Contracts	74,713	32.11	850,038	6.66
Subtotal	94,776	40.73	1,346,171	10.56
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee Gas Pipeline Div Tenneco	27,342	11.75	4,485,550	35.17
Texas Eastern Transmission Corp	110,594	47.52	5,058,990	39.67
Texas Gas Transmission Corp	0	.00	1,863,155	14.61
Subtotal	137,936	59.27	11,407,695	89.44
Company Total Gas Supply	232,712	100.00	12,753,866	100.00
Colorado Interstate Gas Co				
Gas Reserves				
Company Owned	32,526	26.75	586,146	24.14
Producer Contracts	88,996	73.20	1,841,666	75.86
Subtotal	121,522	99.96	2,427,812	100.00
Domestic Gas Supply				
Interstate Pipeline Purchases				
Northwest Pipeline Corp	50	.04	0	.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Major Gas Supply Companies				
Colorado Interstate Gas Co				
Company Total Gas Supply	121,572	100.00	2,427,812	100.00
Columbia Gas Transmission Corp				
Gas Reserves				
Company Owned	36,781	8.59	1,212,410	14.12
Producer Contracts	356,429	83.25	3,212,311	37.41
Subtotal	393,210	91.84	4,424,721	51.54
Domestic Gas Supply				
Interstate Pipeline Purchases				
Kentucky West Va Gas Co	2,922	.68	102,550	1.19
Panhandle Eastern Pipe Line Co	236	.06	0	.00
Tennessee Gas Pipeline Div Tenneco	8,780	2.05	2,823,797	32.89
Texas Eastern Transmission Corp	19,347	4.52	1,017,266	11.85
Transcontinental Gas Pipe Line Corp	3,501	.82	163,930	1.91
Texas Gas Transmission Corp	156	.04	53,447	.62
Subtotal	34,942	8.16	4,160,990	48.46
Company Total Gas Supply	428,152	100.00	8,585,711	100.00
El Paso Natural Gas Co				
Gas Reserves				
Company Owned	19,659	6.85	257,152	3.75
Producer Contracts	267,304	93.15	6,604,973	96.25
Company Total Gas Supply	286,963	100.00	6,862,125	100.00
Florida Gas Transmission Co				
Gas Reserves				
Producer Contracts	160,567	64.25	572,251	76.97
Domestic Gas Supply				
Interstate Pipeline Purchases				
Southern Natural Gas Co	180	.07	54,788	7.37
Intrastate Pipeline Purchases				
Amoco Production[a]	7,478	2.99	0	.00
Panhandle Gas Co[a]	81,692	32.69	107,021	14.40
Synthetic Natural Gas Purchases				
Waste Management Inc[a]	0	.00	9,385	1.26
Subtotal	89,350	35.75	171,194	23.03
Company Total Gas Supply	249,917	100.00	743,445	100.00
K N Energy Inc				
Gas Reserves				
Company Owned	0	.00	62,970	5.58
Producer Contracts	78,108	96.61	1,019,826	90.45
Subtotal	78,108	96.61	1,082,796	96.03
Domestic Gas Supply				
Interstate Pipeline Purchases				
Colorado Interstate Gas Co	988	1.22	2,525	.22
Northern Natural Div InterNorth Inc	148	.18	19,229	1.71
Panhandle Eastern Pipe Line Co	1,608	1.99	22,992	2.04
Subtotal	2,744	3.39	44,746	3.97
Company Total Gas Supply	80,852	100.00	1,127,542	100.00
Natural Gas Pipeline Co of America				
Gas Reserves				
Company Owned	13,730	3.58	417,534	20.91

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)

(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Major Gas Supply Companies				
Natural Gas Pipeline Co of America				
Gas Reserves				
Producer Contracts	158,974	41.45	1,004,882	50.32
Subtotal	172,704	45.03	1,422,416	71.22
Domestic Gas Supply				
Interstate Pipeline Purchases				
Cimarron Transmission Co	2,704	.71	535	.03
Great Lakes Gas Transmission Co	62,322	16.25	114,616	5.74
Valero Interstate Transmission Co	141	.04	102	.01
Intrastate Pipeline Purchases				
Acacia Pipeline Corp[a]	641	.17	7,194	.36
Mv Pipeline Co[a]	4,513	1.18	3,480	.17
Coal Gasification Purchases				
Great Plains Gasification[a]	9,766	2.55	196,929	9.86
Subtotal	80,087	20.88	322,856	16.17
Import Gas Supply				
Pipeline Purchases				
Progas Limited[a]	28,096	7.33	104,925	5.25
Other Gas Supply				
Amoco Production[a]	3,790	.99	5,192	.26
Arco Oil & Gas[a]	2,793	.73	4,476	.22
Associated Intrastate Pl[a]	0	.00	377	.02
Associated Natural Gas Co[a]	469	.12	448	.02
Corpus Christi Oil & Gas[a]	309	.08	448	.02
Gsf Energy Inc[a]	756	.20	4,373	.22
Mobil Natural Gas Inc[a]	4,277	1.12	70,924	3.55
Natural Gas Clearinghouse[a]	0	.00	4,933	.25
Odeco Oil & Gas[a]	0	.00	1,092	.05
Phillips Petroleum[a]	1,141	.30	2,148	.11
Sante Fe Energy[a]	308	.08	627	.03
Shell Gas Trading Company[a]	9,702	2.53	51,400	2.57
Sonat Exploration[a]	149	.04	448	.02
Various[a]	78,922	20.58	0	.00
Vengas Marketing Company[a]	0	.00	77	.00
Company Total Gas Supply	383,503	100.00	1,997,160	100.00
Northern Natural Div InterNorth Inc				
Gas Reserves				
Company Owned	12,352	2.96	132,972	7.43
Producer Contracts	293,417	70.28	1,363,075	76.12
Subtotal	305,769	73.24	1,496,047	83.54
Domestic Gas Supply				
Interstate Pipeline Purchases				
Nw Alaskan Pipeline[a]	63,530	15.22	263,681	14.72
Intrastate Pipeline Purchases				
Exxon[a]	1,201	.29	10,545	.59
Subtotal	64,731	15.50	274,226	15.31
Import Gas Supply				
Pipeline Purchases				
Transcanada Pipeline[a]	47,008	11.26	20,457	1.14
Company Total Gas Supply	417,508	100.00	1,790,730	100.00
Northwest Pipeline Corp				
Gas Reserves				
Company Owned	18,122	15.98	760,556	33.23
Producer Contracts	64,902	57.24	1,490,915	65.15
Subtotal	83,024	73.22	2,251,471	98.38
Import Gas Supply				
Pipeline Purchases				
Westcoast Transmission[a]	30,367	26.78	37,088	1.62

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Major Gas Supply Companies				
Northwest Pipeline Corp				
Company Total Gas Supply	113,391	100.00	2,288,559	100.00
Panhandle Eastern Pipe Line Co				
Gas Reserves				
Company Owned	0	.00	126,246	5.90
Producer Contracts	56,055	70.46	1,287,916	60.16
Subtotal	56,055	70.46	1,414,162	66.05
Domestic Gas Supply				
Interstate Pipeline Purchases				
Kn Energy Incorporated[a]	1,893	2.38	32,402	1.51
Northwest Alaskan Pipeline Co	17,080	21.47	337,620	15.77
Trunkline Gas Co	2,213	2.78	320,707	14.98
Western Gas Interstate Co	4	.01	55	.00
Zenith Natural Gas Co	1,111	1.40	1,727	.08
Intrastate Pipeline Purchases				
Amoco Production[a]	1,203	1.51	34,259	1.60
Subtotal	23,504	29.54	726,770	33.95
Company Total Gas Supply	79,559	100.00	2,140,932	100.00
Sea Robin Pipeline Co				
Gas Reserves				
Producer Contracts	3,321	100.00	66,905	100.00
Company Total Gas Supply	3,321	100.00	66,905	100.00
Southern Natural Gas Co				
Gas Reserves				
Company Owned	0	.00	114,205	7.59
Producer Contracts	278,806	99.84	1,322,840	87.95
Subtotal	278,806	99.84	1,437,045	95.54
Domestic Gas Supply				
Interstate Pipeline Purchases				
Border Gas, Inc[a]	0	.00	29,220	1.94
Sea Robin Pipeline Co	458	.16	37,876	2.52
Subtotal	458	.16	67,096	4.46
Company Total Gas Supply	279,264	100.00	1,504,141	100.00
Tennessee Gas Pipeline Div Tenneco				
Gas Reserves				
Company Owned	990	.17	149,184	3.37
Producer Contracts	555,502	93.85	3,302,264	74.64
Subtotal	556,492	94.02	3,451,448	78.01
Domestic Gas Supply				
Interstate Pipeline Purchases				
Border Gas Inc	0	.00	287,547	6.50
Valley Gas Transmission Inc	2,545	.43	5,154	.12
Coal Gasification Purchases				
Great Plains Gasification[a]	14,315	2.42	300,572	6.79
Subtotal	16,860	2.85	593,273	13.41
Import Gas Supply				
Pipeline Purchases				
Progas[a]	18,524	3.13	379,705	8.58
Company Total Gas Supply	591,876	100.00	4,424,426	100.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Major Gas Supply Companies				
Texas Eastern Transmission Corp				
Gas Reserves				
Company Owned	1,137	0.16	111,448	1.91
Producer Contracts	555,366	77.58	2,510,719	43.05
Subtotal	556,503	77.74	2,622,167	44.96
Domestic Gas Supply				
Interstate Pipeline Purchases				
United Gas Pipe Line Co	0	.00 *	1,460,000	25.03
Texas Gas Pipe Line[a]	550	.08	366	.01
Texas Gas Transmission Corp	88,317	12.34	1,715,500	29.41
Intrastate Pipeline Purchases				
Amalgamated Pipeline Co[a]	153	.02	0	.00
Anthem Energy Co[a]	118	.02	0	.00
B. P. Gas Transmission Co[a]	507	.07	0	.00
Concorde Gas Marketing Inc[a]	3,158	.44	0	.00
Diamond Pipeline Company[a]	5,230	.73	0	00
Energy Production Corp (TX)[a]	1,724	.24	0	.00
Excel Gas Marketing Inc[a]	566	.08	0	.00
Graham Royalty Ltd (LA)[a]	26	.00	0	.00
Jaywell Energy Corp[a]	2,914	.41	0	.00
Jerrico Energy Inc (TX)[a]	286	.04	0	.00
Koch Hydrocarbon[a]	183	.03	0	.00
Kogas, Inc[a]	1,160	.16	0	.00
Ladd Gas Marketing Inc[a]	15	.00	0	.00
Laser Marketing Company[a]	729	.10	0	.00
Lodi Processing Corporation[a]	62	.01	0	.00
Loutex Energy Inc[a]	2,195	.31	0	.00
Midcon Marketing Corp.[a]	7,675	1.07	0	.00
Natural Gas Clearinghouse[a]	3,389	.47	0	.00
Pennzoil Gas Marketing Co[a]	677	.09	0	.00
PSI, Inc[a]	571	.08	0	.00
Shell Gas Trading Company[a]	1,343	.19	0	.00
Sonat Marketing Company[a]	291	.04	0	.00
Sunbelt Oil Field Service[a]	424	.06	0	.00
Teal Gathering Company[a]	769	.11	0	.00
Tejas Hydrocarbon[a]	3,465	.48	0	.00
Texaco Gas Marketing Inc[a]	437	.06	0	.00
Texcol Gas Services Inc[a]	1,325	.19	0	.00
Texas Eastern Gas Services[a]	9,648	1.35	0	.00
Transgas Inc[a]	2	.00	0	.00
Valero Industrial Gas[a]	1,047	.15	0	.00
Vesta Energy Co[a]	1,048	.15	0	.00
Wilmar Pipelines Inc[a]	7	.00	0	.00
Woodward Marketing Inc[a]	1,181	.16	0	.00
Subtotal	141,192	19.72	3,175,866	54.45
Import Gas Supply				
Pipeline Purchases				
Progas Ltd[a]	18,164	2.54	34,160	.59
Company Total Gas Supply	715,859	100.00	5,832,193	100.00
Texas Gas Transmission Corp				
Gas Reserves				
Company Owned	11	.01	117,782	4.74
Producer Contracts	108,800	58.76	1,045,478	42.04
Subtotal	108,811	58.76	1,163,260	46.78
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee Gas Pipeline Div Tenneco	3,723	2.01	129,065	5.19
Texas Eastern Transmission Corp	71,452	38.59	1,194,483	48.03
Intrastate Pipeline Purchases				
Amalgamated Pipeline Co[a]	428	.23	0	.00
Fmp Operating Co[a]	351	.19	0	.00
Amoco Production[a]	343	.19	0	.00
Texaco Inc[a]	65	.04	0	.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Major Gas Supply Companies				
Texas Gas Transmission Corp				
Domestic Gas Supply				
Subtotal	76,362	41.24	1,323,548	53.22
Company Total Gas Supply	185,173	100.00	2,486,808	100.00
Transcontinental Gas Pipe Line Corp				
Gas Reserves				
Company Owned	0	.00	100,036	3.34
Producer Contracts	805,318	98.40	2,834,329	94.57
Subtotal	805,318	98.40	2,934,365	97.91
Domestic Gas Supply				
Interstate Pipeline Purchases				
Texas Gas Pipe Line[a]	954	.12	2,411	.08
Coal Gasification Purchases				
Great Plains Gasification[a]	12,182	1.49	60,225	2.01
Subtotal	13,136	1.60	62,636	2.09
Company Total Gas Supply	818,454	100.00	2,997,001	100.00
Transwestern Pipeline Co				
Gas Reserves				
Producer Contracts	124,745	100.00	961,555	100.00
Company Total Gas Supply	124,745	100.00	961,555	100.00
Trunkline Gas Co				
Gas Reserves				
Company Owned	0	.00	30,791	4.24
Producer Contracts	168,937	100.00	695,979	95.76
Company Total Gas Supply	168,937	100.00	726,770	100.00
United Gas Pipe Line Co				
Gas Reserves				
Company Owned	0	.00	112,118	21.22
Producer Contracts	31,371	38.22	360,480	68.22
Subtotal	31,371	38.22	472,598	89.44
Domestic Gas Supply				
Interstate Pipeline Purchases				
Sea Robin Pipeline Co	2,496	3.04	33,452	6.33
Northern Border Pipeline[a]	29,049	35.39	14,600	2.76
Intrastate Pipeline Purchases				
Unidentified[a]	88	.11	0	.00
J H Bond[a]	21	.03	89	.02
MHM[a]	0	.00	232	.04
Mobil[a]	17	.02	54	.01
Oakland Corp, et al[a]	3	.00	653	.12
Rutherford Oil Corp[a]	78	.10	8	.00
Vintage[a]	330	.40	3,214	.61
Amoco Production[a]	1	.00	170	.03
Esenjay Petroleum[a]	0	.00	37	.01
Exxon[a]	2	.00	95	.02
Koch Hydrocarbon[a]	55	.07	538	.10
Lgs Exploration Production[a]	43	.05	173	.03
Majestic[a]	1	.00	813	.15
Terra Resources Inc[a]	38	.05	406	.08
Texas Crude Inc Enterprise[a]	0	.00	400	.08
Union Oil Of California[a]	272	.33	732	.14
Vernon Faulconer[a]	0	.00	154	.03

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Major Gas Supply Companies				
United Gas Pipe Line Co				
Domestic Gas Supply				
Subtotal	32,494	39.59	55,820	10.56
Other Gas Supply				
Unidentified[a]	1,574	1.92	0	.00
Pennzoil Marketing[a]	16,641	20.27	0	.00
Company Total Gas Supply	82,060	100.00	528,418	100.00
Valero Interstate Transmission Co				
Gas Reserves				
Producer Contracts	19,848	100.00	36,467	100.00
Company Total Gas Supply	19,848	100.00	36,467	100.00
West Texas Gathering Co				
Gas Reserves				
Producer Contracts	591	100.00	13,324	100.00
Company Total Gas Supply	591	100.00	13,324	100.00
Williams Natural Gas Co				
Gas Reserves				
Company Owned	0	.00	133,511	4.68
Producer Contracts	153,892	95.54	2,679,723	93.94
Subtotal	153,892	95.54	2,813,234	98.62
Domestic Gas Supply				
Interstate Pipeline Purchases				
Arkla Incorporated[a]	1,164	.72	3,620	.13
Ringwood Gathering Co	1,820	1.13	32,075	1.12
Transwestern Pipeline Co	4,199	2.61	3,626	.13
Subtotal	7,183	4.46	39,323	1.38
Company Total Gas Supply	161,075	100.00	2,852,557	100.00
Williston Basin Interstate Pipeline				
Gas Reserves				
Company Owned	1,830	6.03	281,704	68.05
Producer Contracts	28,503	93.97	132,242	31.95
Company Total Gas Supply	30,333	100.00	413,946	100.00
Minor Gas Supply Companies				
Alabama-Tennessee Natural Gas Co				
Gas Reserves				
Producer Contracts	1,408	11.03	1,051	2.40
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee Gas Pipeline Div Tenneco	11,358	88.97	42,753	97.60
Company Total Gas Supply	12,766	100.00	43,804	100.00
Arkansas Oklahoma Gas Corp				
Gas Reserves				
Producer Contracts	1,928	100.00	27,772	100.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Minor Gas Supply Companies				
Arkansas Oklahoma Gas Corp				
Company Total Gas Supply	1,928	100.00	27,772	100.00
Bayou Interstate Pipeline System				
Gas Reserves				
Producer Contracts	690	100.00	355	100.00
Company Total Gas Supply	690	100.00	355	100.00
Caprock Pipeline Co				
Gas Reserves				
Producer Contracts	0	.00	33,498	100.00
Company Total Gas Supply	0	100.00	33,498	100.00
Carnegie Natural Gas Co				
Gas Reserves				
Company Owned	1,716	11.73	33,370	6.67
Producer Contracts	2,873	19.64	27,603	5.52
Subtotal	4,589	31.38	60,973	12.18
Domestic Gas Supply				
Interstate Pipeline Purchases				
Texas Eastern Transmission Corp	10,036	68.62	439,520	87.82
Company Total Gas Supply	14,625	100.00	500,493	100.00
Cimarron Transmission Co				
Gas Reserves				
Producer Contracts	2,686	100.00	13,571	100.00
Company Total Gas Supply	2,686	100.00	13,571	100.00
East Tennessee Natural Gas Co				
Gas Reserves				
Producer Contracts	9,822	18.37	43,855	8.02
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee Gas Pipeline Div Tenneco	40,986	76.66	486,702	89.00
Intrastate Pipeline Purchases				
Intrastate Energy Co[a]	2,655	4.97	16,270	2.98
Subtotal	43,641	81.63	502,972	91.98
Company Total Gas Supply	53,463	100.00	546,827	100.00
Eastern Shore Natural Gas Co				
Gas Reserves				
Producer Contracts	6,618	86.13	0	.00
Domestic Gas Supply				
Interstate Pipeline Purchases				
Columbia Gas Transmission Corp	164	2.13	2,419	1.68
Transcontinental Gas Pipe Line Corp	902	11.74	141,142	98.32

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Minor Gas Supply Companies				
Eastern Shore Natural Gas Co				
Domestic Gas Supply				
Subtotal	1,066	13.87	143,561	100.00
Company Total Gas Supply	7,684	100.00	143,561	100.00
Equitrans Inc[2]				
Gas Reserves				
Company Owned	2,243	4.76	88,807	9.81
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee Marketing[a]	2,552	5.42	0	.00
Kentucky West Va Gas Co	8,269	17.59	203,231	22.46
Tennessee Gas Pipeline Div Tenneco	769	1.63	31,003	3.43
Texas Eastern Transmission Corp	20,516	43.54	454,689	50.24
Intrastate Pipeline Purchases				
Cabot Oil & Gas Co[a]	10,044	21.31	127,287	14.06
Natural Gas Clearinghouse[a]	2,710	5.75	0	.00
Subtotal	44,860	95.24	816,210	90.19
Company Total Gas Supply	47,123	100.00	905,017	100.00
Gas Transport Inc				
Gas Reserves				
Producer Contracts	1,102	21.92	11,020	40.69
Domestic Gas Supply				
Interstate Pipeline Purchases				
Columbia Gas Transmission Corp	3,925	78.08	16,060	59.31
Company Total Gas Supply	5,027	100.00	27,080	100.00
Inland Gas Co Inc				
Gas Reserves				
Company Owned	1,962	35.80	30,589	27.86
Producer Contracts	327	5.97	1,830	1.67
Subtotal	2,289	41.76	32,419	29.53
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee G Pl Div Tenneco[a]	3,192	58.24	77,373	70.47
Company Total Gas Supply	5,481	100.00	109,792	100.00
International Paper Co				
Gas Reserves				
Producer Contracts	1,816	100.00	17,603	100.00
Company Total Gas Supply	1,816	100.00	17,603	100.00
Kentucky West Va Gas Co				
Gas Reserves				
Producer Contracts	22,518	100.00	313,446	100.00
Company Total Gas Supply	22,518	100.00	313,446	100.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Minor Gas Supply Companies				
Lone Star Gas Co Div Enserch Corp				
Gas Reserves				
Company Owned	0	0.00	6,461	6.36
Producer Contracts	18,875	100.00	95,078	93.64
Company Total Gas Supply	18,875	100.00	101,539	100.00
Louisiana-Nevada Transit Co				
Gas Reserves				
Producer Contracts	2,038	100.00	48,188	100.00
Company Total Gas Supply	2,038	100.00	48,188	100.00
Michigan Gas Storage Co				
Gas Reserves				
Company Owned	0	.00	48	100.00
Domestic Gas Supply				
Interstate Pipeline Purchases				
Panhandle Eastern Pipe Line Co	78	1.13	0	.00
Intrastate Pipeline Purchases				
CNG[a]	2,091	30.18	0	.00
Mobil Oil Company[a]	4,759	68.69	0	.00
Subtotal	6,928	100.00	0	.00
Company Total Gas Supply	6,928	100.00	48	100.00
Mid Louisiana Gas Co				
Gas Reserves				
Company Owned	7,585	36.14	63,270	59.38
Producer Contracts	13,403	63.86	43,284	40.62
Company Total Gas Supply	20,988	100.00	106,554	100.00
Midwestern Gas Transmission Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Tennessee Gas Pipeline Div Tenneco	85,084	61.23	2,597,172	88.09
Import Gas Supply				
Pipeline Purchases				
Transcanada Pipeline[a]	22,654	16.30	349,681	11.86
Other Gas Supply				
Earth Exploration Co[a]	61	.04	0	.00
Equitable Life Assur Soc[a]	350	.25	1,610	.05
Tenngasco Corporation[a]	30,654	22.06	0	.00
Tennessee Gas Marketing Co[a]	146	.11	0	.00
Company Total Gas Supply	138,949	100.00	2,948,463	100.00
MIGC Inc				
Gas Reserves				
Producer Contracts	3,501	100.00	28,001	100.00
Company Total Gas Supply	3,501	100.00	28,001	100.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Minor Gas Supply Companies				
Mississippi River Transmission Corp				
Gas Reserves				
Company Owned	0	0.00	52,182	11.44
Producer Contracts	160,094	98.00	362,229	79.40
Subtotal	160,094	98.00	414,411	90.84
Domestic Gas Supply				
Interstate Pipeline Purchases				
Natural Gas Pipeline Co of America	569	.35	7,149	1.57
United Gas Pipe Line Co	0	.00	31,839	6.98
Intrastate Pipeline Purchases				
Tejas Power Corp[a]	1,927	1.18	2,000	.44
East Texas Industrial[a]	766	.47	800	.18
Subtotal	3,262	2.00	41,788	9.16
Company Total Gas Supply	163,356	100.00	456,199	100.00
National Fuel Gas Supply Corp				
Gas Reserves				
Company Owned	5,085	6.62	82,996	5.07
Producer Contracts	13,910	18.12	232,675	14.23
Subtotal	18,995	24.74	315,671	19.30
Domestic Gas Supply				
Interstate Pipeline Purchases				
CNG Transmission Corp[a]	5,734	7.47	39,906	2.44
Columbia Gas Transmission Corp	254	.33	14,596	.89
Tennessee Gas Pipeline Div Tenneco	36,867	48.02	1,227,463	75.05
Texas Eastern Transmission Corp	14,714	19.16	28,740	1.76
Transcontinental Gas Pipe Line Corp	214	.28	9,158	.56
Subtotal	57,783	75.26	1,319,863	80.70
Company Total Gas Supply	76,778	100.00	1,635,534	100.00
North Penn Gas Co				
Gas Reserves				
Company Owned	0	.00	10,115	12.51
Domestic Gas Supply				
Interstate Pipeline Purchases				
CNG Transmission Corp[a]	463	8.20	7,505	9.29
Tennessee Gas Pipeline Div Tenneco	4,033	71.44	62,230	77.00
Transcontinental Gas Pipe Line Corp	0	.00	971	1.20
Intrastate Pipeline Purchases				
Tenngasco[a]	295	5.23	0	.00
Transco Energy Marketing[a]	854	15.13	0	.00
Subtotal	5,645	100.00	70,714	87.49
Company Total Gas Supply	5,645	100.00	80,829	100.00
Orange & Rockland Utilities Inc				
Gas Reserves				
Company Owned	0	.00	9,370	1.53
Domestic Gas Supply				
Interstate Pipeline Purchases				
Algonquin Gas Transmission[a]	9,007	20.02	0	.00
Columbia Gas Transmission Corp	4,312	9.59	368,296	59.95
Tennessee Gas Pipeline Div Tenneco	11,365	25.27	236,691	38.53
Texas Eastern Transmission Corp	1,844	4.10	0	.00

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Minor Gas Supply Companies				
Orange & Rockland Utilities Inc				
Domestic Gas Supply				
Intrastate Pipeline Purchases				
National Gas Clearinghouse[a]	3,838	8.53	0	0.00
Union Pacific[a]	247	.55	0	.00
Cherokee Odi[a]	2,264	5.03	0	.00
Peoples Service[a]	579	1.29	0	.00
Tenngasco[a]	6,710	14.92	0	.00
Citizens Gas Supply Corp[a]	781	1.74	0	.00
Citizens Energy Corp[a]	106	.24	0	.00
Columbia Gas Development[a]	169	.38	0	.00
Texaco Gas Marketing Inc[a]	1,728	3.84	0	.00
Transco[a]	2,031	4.52	0	.00
Subtotal	44,981	100.00	604,987	98.47
Company Total Gas Supply	44,981	100.00	614,357	100.00
Pacific Gas Transmission Co				
Gas Reserves				
Producer Contracts	3,138	.81	26,159	1.31
Import Gas Supply				
Pipeline Purchases				
Alberta & Southern Gas Co[a]	381,953	99.19	1,974,868	98.69
Company Total Gas Supply	385,091	100.00	2,001,027	100.00
Pacific Interstate Offshore Co				
Gas Reserves				
Producer Contracts	16,644	100.00	94,662	100.00
Company Total Gas Supply	16,644	100.00	94,662	100.00
Pacific Interstate Transmission Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Northwest Alaskan Pipeline Co	101,474	100.00	1,226,400	100.00
Company Total Gas Supply	101,474	100.00	1,226,400	100.00
Pacific Offshore Pipeline Co				
Gas Reserves				
Producer Contracts	11,045	100.00	164,250	100.00
Company Total Gas Supply	11,045	100.00	164,250	100.00
Pennsylvania & Southern Gas Co				
Gas Reserves				
Company Owned	0	.00	439	1.00
Producer Contracts	0	.00	243	.55
Subtotal	0	.00	682	1.56
Domestic Gas Supply				
Interstate Pipeline Purchases				
Eastern Shore Natural Gas Co	412	8.94	1,160	2.65
Tennessee Gas Pipeline Div Tenneco	1,913	41.53	34,404	78.48
Transcontinental Gas Pipe Line Corp	2,281	49.52	7,592	17.32

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Minor Gas Supply Companies				
Pennsylvania & Southern Gas Co				
Domestic Gas Supply				
Subtotal	4,606	100.00	43,156	98.44
Company Total Gas Supply	4,606	100.00	43,838	100.00
Questar Pipeline Company[3]				
Gas Reserves				
Company Owned	0	.00	18,520	3.22
Producer Contracts	43,727	77.68	462,862	80.50
Subtotal	43,727	77.68	481,382	83.72
Domestic Gas Supply				
Interstate Pipeline Purchases				
Colorado Interstate Gas Co	828	1.47	2,043	.36
Northwest Pipeline Corp	5	.01	0	.00
Intrastate Pipeline Purchases				
Amoco Production[a]	6	.01	11,652	2.03
Exxon Corp.[a]	2,415	4.29	16,687	2.90
Gary Energy Corporation[a]	1,988	3.53	7,518	1.31
Koch Hydrocarbon[a]	920	1.63	7,185	1.25
Mesa Pipeline Co[a]	2,981	5.30	32,591	5.67
Shell Oil[a]	3,373	5.99	15,358	2.67
Uinta Pipeline Co[a]	51	.09	594	.10
Subtotal	12,567	22.32	93,628	16.28
Company Total Gas Supply	56,294	100.00	575,010	100.00
Ringwood Gathering Co				
Gas Reserves				
Producer Contracts	7,335	100.00	41,990	100.00
Company Total Gas Supply	7,335	100.00	41,990	100.00
Texas Gas Pipeline Corp				
Gas Reserves				
Producer Contracts	1,933	100.00	9,180	100.00
Company Total Gas Supply	1,933	100.00	9,180	100.00
Valley Gas Transmission Inc				
Gas Reserves				
Producer Contracts	0	.00	11,973	100.00
Company Total Gas Supply	0	100.00	11,973	100.00
Washington Gas Light Co				
Gas Reserves				
Company Owned	0	.00	4,099	.46
Producer Contracts	71,466	56.90	0	.00
Subtotal	71,466	56.90	4,099	.46
Domestic Gas Supply				
Interstate Pipeline Purchases				
CNG Transmission Corp[a]	3,679	2.93	434,365	48.38
Columbia Gas Transmission Corp	44,325	35.29	457,614	50.97
Transcontinental Gas Pipe Line Corp	6,120	4.87	1,702	.19

Note: Footnote appears at the end of the table.

Table 12. Total Gas Supplies of Interstate Pipeline Companies with Owned and Contracted Gas Reserves (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Minor Gas Supply Companies				
Washington Gas Light Co				
Domestic Gas Supply				
Subtotal	54,124	43.10	893,681	99.54
Company Total Gas Supply	125,590	100.00	897,780	100.00
Western Gas Interstate Co				
Gas Reserves				
Company Owned	68	2.30	392	1.76
Producer Contracts	1,424	48.17	9,669	43.39
Subtotal	1,492	50.47	10,061	45.14
Domestic Gas Supply				
Interstate Pipeline Purchases				
El Paso Natural Gas Co	225	7.61	3,100	13.91
Intrastate Pipeline Purchases				
Enron Gas Marketing[a]	116	3.92	0	.00
Maxus Energy[a]	297	10.05	0	.00
Meridian[a]	132	4.47	0	.00
Mountain Industrial Gas[a]	112	3.79	0	.00
PSI, Inc[a]	140	4.74	0	.00
Crouch Petroleum[a]	442	14.95	9,125	40.94
Subtotal	1,464	49.53	12,225	54.86
Company Total Gas Supply	2,956	100.00	22,286	100.00
Zenith Natural Gas Co				
Gas Reserves				
Producer Contracts	1,179	100.00	7,033	100.00
Company Total Gas Supply	1,179	100.00	7,033	100.00

[1] Formerly Consolidated Gas Transmission Co.
[2] Formerly Equitable Gas Company
[3] Formerly Mountain Fuel Resources Inc.
[a] Nonjurisdictional companies not required to file Form 15 reports.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 13. Total Gas Supplies of Interstate Pipeline Companies That Purchase Their Total Gas Supply from Other Pipeline Companies
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Algonquin Gas Transmission Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
National Fuel Gas Supply Corp	2,751	1.71	26,244	6.28
Texas Eastern Transmission Corp	152,691	95.18	303,345	72.53
Consolidated Gas[a]	4,977	3.10	88,639	21.19
Company Total Gas Supply	160,419	100.00	418,228	100.00
Associated Natural Gas Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Texas Eastern Transmission Corp	540	11.42	0	.00
Texas Gas Transmission Corp	394	8.33	1,700	100.00
Subtotal	934	19.75	1,700	100.00
Other Gas Supply				
Arkla Energy Marketing[a]	350	7.40	0	.00
Seeco Inc[a]	3,445	72.85	0	.00
Company Total Gas Supply	4,729	100.00	1,700	100.00
Bluefield Gas Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Columbia Gas Transmission Corp	1,520	100.00	4,560	100.00
Company Total Gas Supply	1,520	100.00	4,560	100.00
Border Gas Inc				
Import Gas Supply				
Pipeline Purchases				
Petroleos Mexicanos[a]	0	.00	352,922	100.00
Company Total Gas Supply	0	100.00	352,922	100.00
Boundary Gas Inc				
Import Gas Supply				
Pipeline Purchases				
Chevron USA Inc[a]	32,317	100.00	229,583	100.00
Company Total Gas Supply	32,317	100.00	229,583	100.00
Glacier Gas Company				
Gas Reserves				
Company Owned	293	100.00	2,862	100.00
Company Total Gas Supply	293	100.00	2,862	100.00
Granite State Gas Transmission Inc				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Algonquin Gas Transmission Co	742	1.98	49,904	10.54
Boundary Gas Inc	4,279	11.41	35,738	7.55
Tennessee Gas Pipeline Div Tenneco	13,720	36.58	297,930	62.95
Intrastate Pipeline Purchases				
Tenngasco And Other Spot[a]	16,523	44.06	0	.00
Subtotal	35,264	94.03	383,572	81.04
Import Gas Supply				
Pipeline Purchases				
Shell Canada Limited[a]	2,240	5.97	89,725	18.96

Note: Footnote appears at the end of the table.

Table 13. Total Gas Supplies of Interstate Pipeline Companies That Purchase Their Total Gas Supply from Other Pipeline Companies (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Granite State Gas Transmission Inc				
Company Total Gas Supply	37,504	100.00	473,297	100.00
Great Lakes Gas Transmission Co				
Import Gas Supply				
Pipeline Purchases				
Transcanada Pipeline[a]	93,833	100.00	222,910	100.00
Company Total Gas Supply	93,833	100.00	222,910	100.00
Great Plains Natural Gas Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Midwestern Gas Transmission Co	0	.00	10,196	49.94
Northern Natural Div InterNorth Inc	0	.00	10,222	50.06
Company Total Gas Supply	0	100.00	20,418	100.00
Indiana Utilities Corp				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Texas Gas Transmission Corp	382	100.00	2,232	100.00
Company Total Gas Supply	382	100.00	2,232	100.00
Inter-City Minnesota Pipelines Ltd				
Import Gas Supply				
Pipeline Purchases				
ICG Transmission Ltd[a]	4,211	100.00	56,371	100.00
Company Total Gas Supply	4,211	100.00	56,371	100.00
Interstate Power Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Natural Gas Pipeline Co of America	11,002	60.49	15,779	21.61
Northern Natural Div InterNorth Inc	7,187	39.51	57,253	78.39
Company Total Gas Supply	18,189	100.00	73,032	100.00
Iowa-Illinois Gas & Electric Co				
Gas Reserves				
Company Owned	0	.00	12,864	100.00
Domestic Gas Supply				
Interstate Pipeline Purchases				
Natural Gas Pipeline Co of America	19,841	39.69	0	.00
Northern Natural Div InterNorth Inc	3,223	6.45	0	.00
Intrastate Pipeline Purchases				
Lido Atlantic Trading[a]	802	1.60	0	.00
Mitchell Marketing[a]	152	.30	0	.00
Petrus Oil Company[a]	147	.29	0	.00
Phillips 66 Natural Gas[a]	355	.71	0	.00
Reliance Gas Marketing[a]	547	1.09	0	.00
Suncor Inc[a]	82	.16	0	.00
Western Gas Marketing[a]	64	.13	0	.00
American Central Gas Mktg[a]	5,035	10.07	0	.00
ANR Gathering Co[a]	6,534	13.07	0	.00
Eastex Hydrocarbons Inc.[a]	252	.50	0	.00
Hadson Gas Systems Inc[a]	2,041	4.08	0	.00

Note: Footnote appears at the end of the table.

Table 13. Total Gas Supplies of Interstate Pipeline Companies That Purchase Their Total Gas Supply from Other Pipeline Companies (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
Iowa-Illinois Gas & Electric Co				
Domestic Gas Supply				
Intrastate Pipeline Purchases				
Loutex Energy Inc[a]	227	0.45	0	0.00
Oklahoma Gas Pipeline Co[a]	112	.22	0	.00
Shell Gas Trading Company[a]	695	1.39	0	.00
Apache Corporation[a]	587	1.17	0	.00
Associated Natural Gas Co[a]	1,649	3.30	0	.00
British Petroleum Gas[a]	146	.29	0	.00
Cabot Energy Marketing[a]	2,205	4.41	0	.00
Colony Energy Corporation[a]	227	.45	0	.00
Gastrak Corporation[a]	16	.03	0	.00
Enron Gas Marketing[a]	296	.59	0	.00
Ladd Gas Marketing Inc[a]	445	.89	0	.00
Gulf Energy Marketing[a]	809	1.62	0	.00
Mobil Oil Corporation[a]	361	.72	0	.00
Natural Gas Clearinghouse[a]	2,897	5.80	0	.00
Sante Fe Minerals[a]	237	.47	0	.00
Subtotal	49,984	100.00	0	.00
Company Total Gas Supply	49,984	100.00	12,864	100.00
Northwest Alaskan Pipeline Co				
Import Gas Supply				
Pipeline Purchases				
Pan-Alberta Gas Ltd[a]	210,465	100.00	6,130,800	100.00
Company Total Gas Supply	210,465	100.00	6,130,800	100.00
Ohio River Pipeline Corp				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Texas Gas Transmission Corp	5,809	100.00	15,376	100.00
Company Total Gas Supply	5,809	100.00	15,376	100.00
Paiute Pipeline Co[1]				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Northwest Pipeline Corp	6,186	100.00	6,186	100.00
Company Total Gas Supply	6,186	100.00	6,186	100.00
Raton Natural Gas Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Colorado Interstate Gas Co	1,160	100.00	7,000	100.00
Company Total Gas Supply	1,160	100.00	7,000	100.00
South Georgia Natural Gas Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Southern Natural Gas Co	6,181	100.00	44,935	100.00
Company Total Gas Supply	6,181	100.00	44,935	100.00
South Penn Gas Co				
Domestic Gas Supply				
Interstate Pipeline Purchases				
Columbia Gas Transmission Corp	257	100.00	2,800	100.00

Note: Footnote appears at the end of the table.

Table 13. Total Gas Supplies of Interstate Pipeline Companies That Purchase Their Total Gas Supply from Other Pipeline Companies (Continued)
(Million Cubic Feet)

Company Name and Gas Supply Source	Produced and/or Purchased		Remaining Gas Supply	
	Volume 1988	Percent Company Total	Volume 1988	Percent Company Total
South Penn Gas Co				
Company Total Gas Supply	257	100.00	2,800	100.00

[1] Formerly Southwest Gas Corp.
[a] Nonjurisdictional companies not required to file Form 15 reports.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Deliverability

All interstate pipeline companies reporting on Form 15 project the annual volumes of natural gas expected to be deliverable from each domestic certificated source for each of the 5 years following the report year. These data are filed in Schedule II. Additionally, 35 companies are required by FERC to report in Schedule I a 20-year projection of the total annual volumes of gas, including pipeline purchases and imports, deliverable from total year-end gas supplies. These deliverability forecasts are the reporting company's best year-by-year estimates of its capability to deliver gas from present gas supplies (Table 16). Future load variations and future changes in gas supply are not considered. The market requirements are only those that have been authorized at the end of the report year. Both firm and interruptible authorized gas requirements, however, are included.

A comparison of the projected volumes deliverable over the past 5 years (Table 14) shows an aggregate projection of 42.0 trillion cubic feet in 1984, decreasing by 44.7 percent to 23.2 trillion cubic feet in 1988. Annual deliveries for the 5-year period, 1989-1993, are projected to decline from 6.7 trillion cubic feet in 1989 to 3.0 trillion cubic feet in 1993. Aggregate deliveries projected for the 5-year period are shown by State in Figure 4.

Table 15 shows 1989-1993 deliveries projected from base year 1988 year-end reserves and the percent depletion in reserves by State and substate area. The depletion of total year-end 1988 reserves projected by year-end 1993 is 47.6 percent.

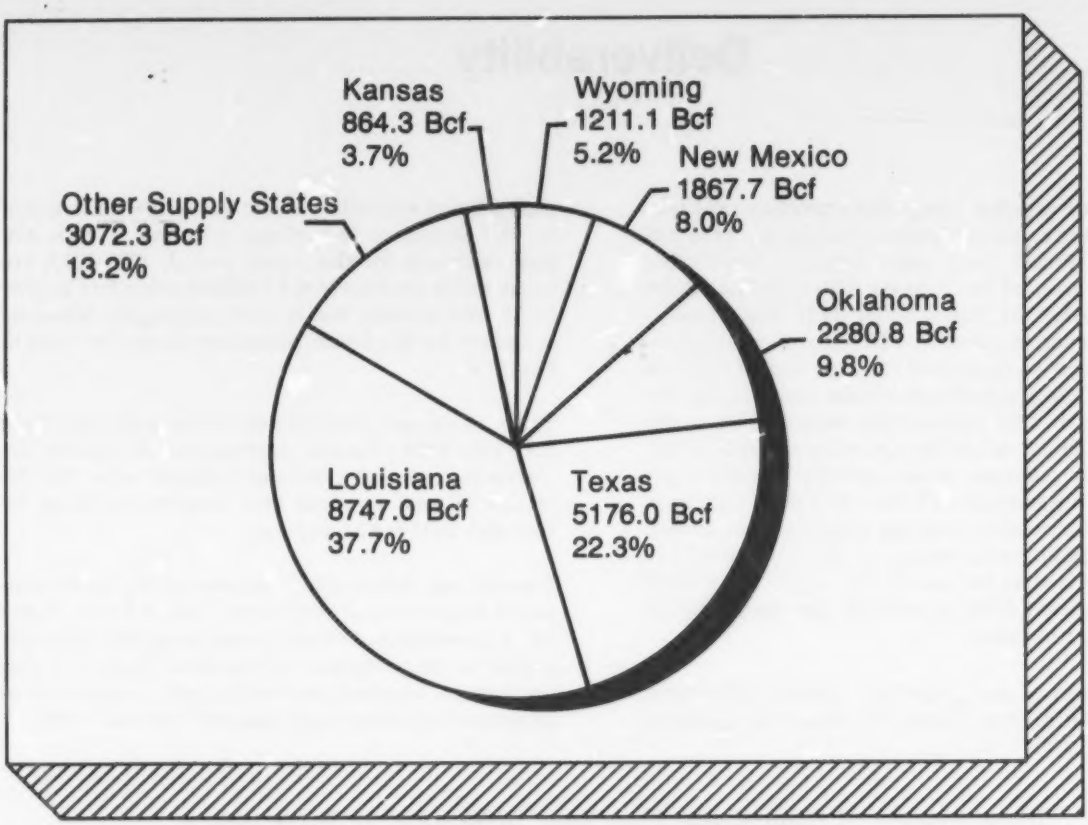
Twenty-year deliverability summaries for the 35 companies required to file Schedule I are shown in Table 16. A progressive decline in total projected deliveries is clear in the composite of these data (Table 17). Figure 5 shows reported production and a comparison of projected deliveries from year-end 1963 and 1988.

Table 14. Comparisons of Composite Five-Year Deliverability Projections from Year-End Dedicated Domestic Gas Reserves
(Billion Cubic Feet)

Year	Annual Volumes Scheduled vs. Actual Volumes Purchased or Produced				
	1984	1985	1986	1987	1988
1984	[a] 10,422	--	--	--	--
1985	11,361	[a] 8,918	--	--	--
1986	9,897	10,795	[a] 7,578	--	--
1987	8,266	9,076	9,193	[a] 6,655	--
1988	6,780	7,721	7,751	7,634	[a] 5,804
1989	5,696	6,455	6,492	6,671	6,719
1990	--	5,268	5,456	5,557	5,457
1991	--	--	4,724	4,687	4,400
1992	--	--	--	3,929	3,653
1993	--	--	--	--	2,990
Five-Year Deliverability Projections[b]	42,000	39,315	33,616	28,478	23,219
Year-End Reserves	89,894	85,102	80,602	65,135	48,792
Five-Year Deliverablity Projections as a Percent of Year-End Reserves	46.7	46.2	41.7	43.7	47.6

[a] Actual volume purchased and/or produced for the year indicated.
[b] Sum of annual volumes scheduled.
— = Not Applicable.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Figure 4. Five-Year Projected Deliverability by State
(Billion Cubic Feet)



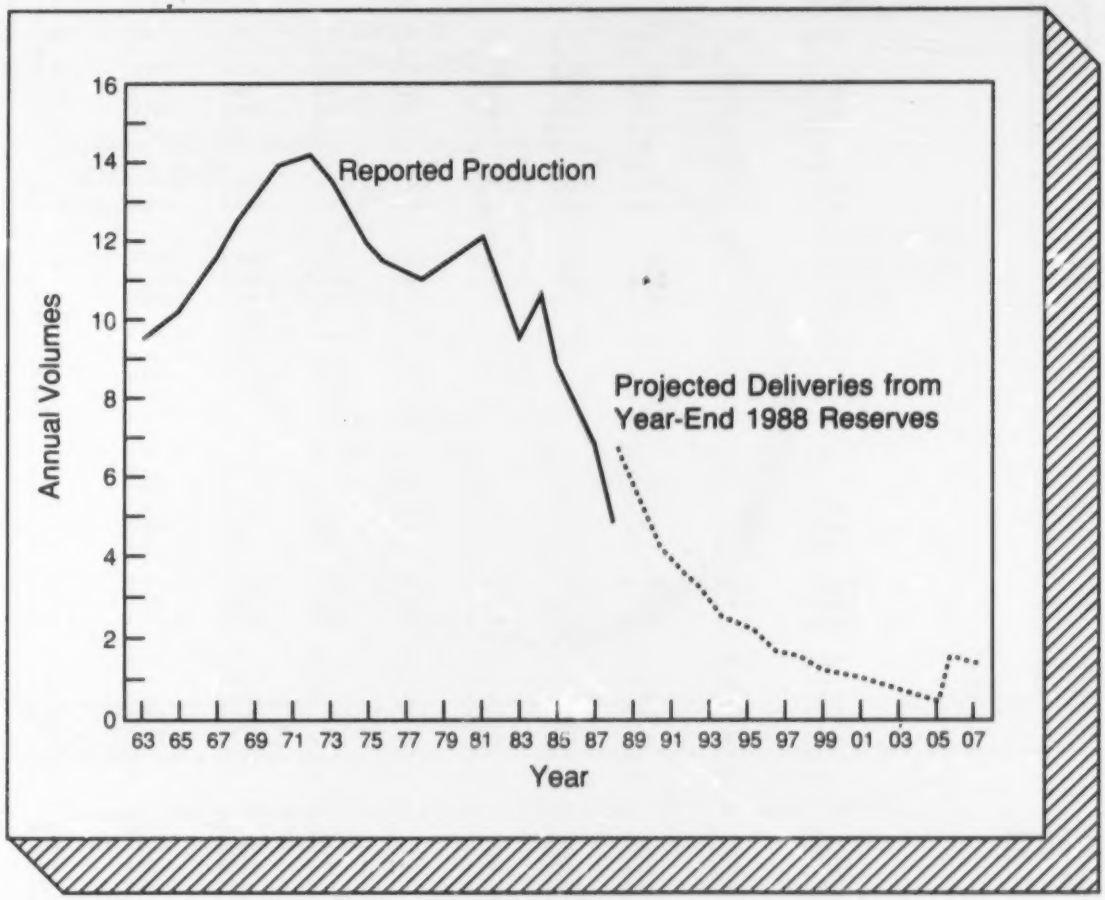
Source: Energy Information Administration, Form FERC-15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 15. Five-Year (1989-1993) Composite Deliverability Projections
(Billion Cubic Feet)

State	Gas Reserves 12-31-88	Production 1988	Annual Deliverability Projections						Remaining Reserves 12-31-93	Percent Depletion 12-31-93
			1989	1990	1991	1992	1993	Total		
Alabama	111.6	30.7	32.9	18.9	12.1	7.4	5.7	77.1	34.5	69.1
Arizona	.8	.0	.0	.0	.0	.0	.0	.0	.8	.0
Arkansas	1,454.1	169.6	205.2	146.2	133.7	127.8	99.5	712.5	741.6	49.0
California	258.9	27.7	29.0	25.5	23.0	21.2	19.8	118.4	140.5	45.7
Colorado	829.2	68.0	66.7	62.6	58.7	54.9	50.3	293.2	536.0	35.4
Florida	10.2	2.0	1.6	1.3	1.1	.9	.7	5.5	4.7	53.9
Illinois	9.4	15.4	6.9	.3	.3	.2	.1	7.9	1.5	84.0
Iowa	12.9	26.9	.0	.0	.0	.0	.0	.0	12.9	.0
Kansas	3,835.0	167.3	191.9	184.9	167.9	167.7	151.8	864.3	2,970.7	22.5
Kentucky	671.7	47.7	49.9	46.7	44.3	42.4	40.7	224.1	447.6	33.4
Louisiana										
Northern Louisiana	1,216.0	145.5	170.7	143.1	128.1	110.8	95.7	648.4	567.6	53.3
Southern Louisiana	10,473.3	2,081.4	2,524.5	2,042.1	1,574.2	1,148.2	809.8	8,098.6	2,374.7	77.3
Onshore	2,184.6	332.2	465.7	375.2	303.1	217.1	164.6	1,525.7	658.9	69.8
Warranty[a]	117.4	152.1	117.4	.0	.0	.0	.0	117.4	.0	100.0
Onshore Total	2,302.0	484.3	583.1	375.2	303.1	217.1	164.6	1,643.1	658.9	71.4
Offshore State	280.1	73.2	68.8	52.4	46.0	40.6	21.6	229.3	50.8	81.9
Offshore Federal	7,891.2	1,523.9	1,872.6	1,614.5	1,225.1	890.5	623.6	6,226.2	1,665.0	78.9
Offshore Total	8,171.3	1,597.1	1,941.4	1,666.9	1,271.1	931.1	645.2	6,455.5	1,715.8	79.0
State Total	11,689.3	2,226.9	2,695.3	2,185.2	1,702.2	1,259.0	905.5	8,747.0	2,942.3	74.8
Maryland	40.2	71.5	.0	.0	.0	.0	.0	.1	40.1	.2
Massachusetts	.0	16.5	.0	.0	.0	.0	.0	.0	.0	.0
Michigan	140.2	6.9	.0	.0	.0	.0	.0	.0	140.2	.0
Mississippi	414.0	134.8	84.1	67.1	47.9	34.3	24.5	257.9	156.1	62.3
Montana	447.6	21.0	24.3	10.9	9.9	9.2	8.5	62.8	384.8	14.0
Nebraska	89.6	.4	2.5	2.3	2.2	1.9	1.6	10.7	78.9	11.9
New Mexico										
San Juan Basin	6,044.0	173.2	286.3	257.4	246.6	248.0	245.7	1,284.1	4,759.9	21.2
Permian Basin	1,234.9	140.8	159.5	139.8	110.7	97.1	76.6	583.6	651.3	47.3
State Total	7,278.8	314.0	445.9	397.2	357.2	345.1	322.3	1,867.7	5,411.1	25.7
New York	169.2	26.6	14.0	11.9	10.7	9.8	9.0	55.3	113.9	32.7
North Dakota	45.5	16.2	13.2	11.1	6.9	1.6	1.4	34.2	11.3	75.2
Ohio	293.1	16.7	28.0	24.0	21.1	18.8	16.9	108.8	184.3	37.1
Oklahoma	4,779.7	512.0	592.3	489.9	436.4	403.5	358.7	2,280.8	2,498.9	47.7
Pennsylvania	888.9	48.4	63.9	57.7	52.9	49.4	45.5	269.3	619.6	30.3
South Dakota	3.6	.5	.3	.3	1.1	1.0	.5	3.2	.4	88.9
Tennessee	16.3	2.7	2.6	2.6	2.2	2.2	2.0	11.6	4.7	71.2
Texas										
RR District No. 1 (North)	2.3	.2	.2	.1	.1	.1	.1	.7	1.6	30.4
RR District No. 1 (South)	113.1	29.1	32.7	22.3	17.5	12.1	7.3	91.8	21.3	81.2
RR District No. 2	292.5	51.8	64.4	54.6	39.1	28.3	20.6	207.0	85.5	70.8
RR District No. 3	154.2	34.5	36.6	26.1	20.9	16.0	11.7	111.2	43.0	72.1
RR District No. 4	669.6	168.8	166.4	122.4	86.2	63.6	42.0	480.5	189.1	71.8
RR District No. 5	1.3	.4	.3	.3	.2	.1	.1	1.0	.3	76.9
RR District No. 6	965.9	111.4	139.5	122.5	105.7	91.4	82.1	541.2	424.7	56.0
RR District No. 7B	107.5	81.8	107.2	.0	.0	.0	.0	107.3	.2	99.8
RR District No. 7C	330.0	43.8	41.6	27.1	24.2	21.9	19.9	134.7	195.3	40.8
RR District No. 8	782.1	90.1	90.4	85.7	78.3	77.5	54.2	386.1	396.0	49.4
RR District No. 8A	29.7	3.2	3.9	3.2	2.8	2.4	2.1	14.5	15.2	48.8
RR District No. 9	142.4	31.2	33.5	25.7	19.5	15.4	11.8	105.9	36.5	74.4
RR District No. 10	1,678.4	178.0	179.2	150.0	132.4	119.4	107.4	688.3	990.1	41.0
Offshore State	55.0	12.7	18.1	14.6	10.7	4.8	2.6	50.8	4.2	92.4
Offshore Federal	2,749.0	624.8	775.2	638.2	397.2	259.3	185.0	2,254.9	494.1	82.0
Offshore Total	2,804.0	637.5	793.3	652.8	407.9	264.1	187.6	2,305.7	498.3	82.2
State Total	8,073.1	1,461.9	1,689.3	1,292.7	934.8	712.3	546.9	5,176.0	2,897.1	64.1
Utah	500.9	27.1	29.8	28.8	26.5	25.9	25.5	136.4	364.5	27.2
Virginia	145.2	16.0	18.8	17.1	14.9	11.0	9.6	71.4	73.8	49.2
Washington	5.4	.0	.0	.0	.0	.0	.0	.0	5.4	.0
West Virginia	1,587.1	119.4	147.5	132.6	120.4	110.1	101.5	611.9	975.2	38.6
Wyoming	3,452.3	209.3	283.0	239.6	211.7	235.1	241.8	1,211.1	2,241.2	35.1
Undesignated[b]	1,537.6	.0	.0	.0	.0	.0	.0	.0	1,537.6	.0
Total All States	48,791.6	5,804.2	6,718.7	5,457.4	4,400.0	3,652.6	2,990.5	23,219.2	25,572.4	47.6

[a] Warranty reserves are reserves guaranteed by contract but not supported by dedication of specific approved sources of supply.
[b] Includes reserves in underground storage which were reported without a State designation.
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Figure 5. Production and Composite Forecast of Annual Deliveries 1963 through 2008
(Trillion Cubic Feet)



Source: Energy Information Administration, Form FERC-15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 16. Deliverability Summaries: Estimated Annual Volumes
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
ANR Pipeline Co						
1989	161,258	0	21,775	183,033	--	--
1990	161,258	0	21,775	183,033	--	--
1991	162,830	0	20,203	183,033	--	--
1992	174,033	0	9,000	183,033	--	--
1993	183,033	0	0	183,033	--	--
1994	166,244	0	0	166,244	--	--
1995	126,461	0	0	126,461	--	--
1996	100,773	0	0	100,773	--	--
1997	80,137	0	0	80,137	--	--
1998	66,808	0	0	66,808	--	--
1999	57,319	0	0	57,319	--	--
2000	50,058	0	0	50,058	--	--
2001	43,739	0	0	43,739	--	--
2002	38,727	0	0	38,727	--	--
2003	34,775	0	0	34,775	--	--
2004	31,179	0	0	31,179	--	--
2005	22,288	0	0	22,288	--	--
2006	5,022	0	0	5,022	--	--
2007	2,356	0	0	2,356	--	--
2008	652	0	0	652	--	--
Projected Total	1,668,950	0	72,753	1,741,703	183,033	0
Arkla Inc						
1989	406,771	408	12,940	420,119	--	--
1990	378,580	408	12,940	391,928	--	--
1991	349,178	408	12,940	362,526	--	--
1992	321,352	408	12,940	334,700	--	--
1993	293,211	408	12,940	306,559	--	--
1994	263,818	408	12,940	277,166	--	--
1995	234,810	408	12,940	248,158	--	--
1996	210,613	408	12,940	223,961	--	--
1997	181,225	408	12,940	194,573	--	--
1998	162,861	408	12,940	176,209	--	--
1999	129,783	408	12,940	143,131	--	--
2000	114,469	408	12,940	127,817	--	--
2001	103,112	408	12,940	116,460	--	--
2002	93,575	408	12,940	106,923	--	--
2003	83,637	408	12,940	96,985	--	--
2004	74,032	408	12,940	87,380	--	--
2005	61,715	408	12,940	75,063	--	--
2006	55,262	408	12,940	68,610	--	--
2007	32,989	408	12,940	46,337	--	--
2008	16,316	408	12,940	29,664	--	--
Projected Total	3,567,309	8,160	258,800	3,834,269	449,857	0
Carnegie Natural Gas Co						
1989	4,450	0	21,976	26,426	--	--
1990	4,400	0	21,976	26,376	--	--
1991	4,150	0	21,976	26,126	--	--
1992	4,100	0	21,976	26,076	--	--
1993	4,050	0	21,976	26,026	--	--
1994	4,000	0	21,976	25,976	--	--
1995	3,950	0	21,976	25,926	--	--
1996	3,900	0	21,976	25,876	--	--
1997	3,850	0	21,976	25,826	--	--
1998	3,800	0	21,976	25,776	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Carnegie Natural Gas Co						
1989	2,750	0	21,976	24,726	--	--
2000	2,600	0	21,976	24,576	--	--
2001	2,550	0	21,976	24,526	--	--
2002	2,400	0	21,976	24,376	--	--
2003	2,200	0	21,976	24,176	--	--
2004	1,975	0	21,976	23,951	--	--
2005	1,700	0	21,976	23,676	--	--
2006	1,500	0	21,976	23,476	--	--
2007	1,400	0	21,976	23,376	--	--
2008	1,248	0	21,976	23,224	--	--
Projected Total	60,973	0	439,520	500,493	15,889	0
CNG Transmission Corp						
1989	103,284	0	570,008	673,292	--	--
1990	98,339	0	570,008	668,347	--	--
1991	93,934	0	570,008	663,942	--	--
1992	89,460	0	571,515	660,975	--	--
1993	84,134	0	570,008	654,142	--	--
1994	76,772	0	570,008	646,780	--	--
1995	70,597	0	570,008	640,605	--	--
1996	60,971	0	571,515	632,486	--	--
1997	54,951	0	570,008	624,959	--	--
1998	50,356	0	570,008	620,364	--	--
1999	46,587	0	570,008	616,595	--	--
2000	34,503	0	571,515	606,018	--	--
2001	31,391	0	570,008	601,399	--	--
2002	25,751	0	570,008	595,759	--	--
2003	23,365	0	570,008	593,373	--	--
2004	21,599	0	571,515	593,114	--	--
2005	19,946	0	570,008	589,954	--	--
2006	18,216	0	570,008	588,224	--	--
2007	17,313	0	570,008	587,321	--	--
2008	16,511	0	571,515	588,026	--	--
Projected Total	1,037,980	0	11,407,695	12,445,675	274,768	0
Colorado Interstate Gas Co						
1989	181,011	0	0	181,011	--	--
1990	176,431	0	0	176,431	--	--
1991	169,179	0	0	169,179	--	--
1992	160,534	0	0	160,534	--	--
1993	148,428	0	0	148,428	--	--
1994	148,428	0	0	148,428	--	--
1995	148,428	0	0	148,428	--	--
1996	133,614	0	0	133,614	--	--
1997	113,999	0	0	113,999	--	--
1998	97,885	0	0	97,885	--	--
1999	84,187	0	0	84,187	--	--
2000	72,560	0	0	72,560	--	--
2001	62,737	0	0	62,737	--	--
2002	54,572	0	0	54,572	--	--
2003	47,553	0	0	47,553	--	--
2004	41,556	0	0	41,556	--	--
2005	36,367	0	0	36,367	--	--
2006	32,018	0	0	32,018	--	--
2007	28,223	0	0	28,223	--	--
2008	25,007	0	0	25,007	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Colorado Interstate Gas Co						
Projected Total	1,964,717	0	0	1,964,717	117,757	233,300
Columbia Gas Transmission Corp						
1989	614,681	0	272,339	887,020	--	--
1990	540,257	0	204,519	744,776	--	--
1991	451,772	0	204,519	656,291	--	--
1992	379,336	0	205,077	584,415	--	--
1993	327,980	0	204,519	532,499	--	--
1994	244,679	0	204,519	449,198	--	--
1995	171,973	0	204,519	376,492	--	--
1996	129,073	0	205,077	334,150	--	--
1997	95,906	0	204,519	300,425	--	--
1998	78,214	0	204,519	282,733	--	--
1999	66,807	0	204,519	271,326	--	--
2000	55,752	0	205,077	260,829	--	--
2001	43,938	0	204,519	248,457	--	--
2002	38,872	0	204,519	243,391	--	--
2003	34,835	0	204,519	239,354	--	--
2004	31,716	0	205,077	236,793	--	--
2005	28,783	0	204,519	233,302	--	--
2006	26,103	0	204,519	230,622	--	--
2007	23,787	0	204,519	228,306	--	--
2008	21,672	0	205,077	226,749	--	--
Projected Total	3,406,138	0	4,160,990	7,567,128	309,166	559,749
El Paso Natural Gas Co						
1989	453,906	0	0	453,906	--	--
1990	393,835	0	0	393,835	--	--
1991	353,826	0	0	353,826	--	--
1992	338,492	0	0	338,492	--	--
1993	313,101	0	0	313,101	--	--
1994	298,608	0	0	298,608	--	--
1995	281,092	0	0	281,092	--	--
1996	257,532	0	0	257,532	--	--
1997	238,501	0	0	238,501	--	--
1998	222,554	0	0	222,554	--	--
1999	206,006	0	0	206,006	--	--
2000	200,590	0	0	200,590	--	--
2001	178,570	0	0	178,570	--	--
2002	167,045	0	0	167,045	--	--
2003	156,749	0	0	156,749	--	--
2004	147,171	0	0	147,171	--	--
2005	137,980	0	0	137,980	--	--
2006	128,995	0	0	128,995	--	--
2007	120,466	0	0	120,466	--	--
2008	120,466	0	0	120,466	--	--
Projected Total	4,715,485	0	0	4,715,485	84,051	1,433,986

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Equitrans Gas Co						
1989	17,584	0	32,136	49,720	--	--
1990	16,509	0	29,143	45,652	--	--
1991	15,525	0	29,701	45,226	--	--
1992	14,607	0	30,728	45,335	--	--
1993	13,764	0	31,681	45,445	--	--
1994	12,986	0	32,568	45,554	--	--
1995	12,266	0	33,288	45,554	--	--
1996	11,598	0	33,845	45,443	--	--
1997	10,980	0	34,354	45,334	--	--
1998	10,405	0	34,820	45,225	--	--
1999	9,891	0	35,235	45,126	--	--
2000	9,373	0	35,634	45,007	--	--
2001	8,910	0	36,138	45,098	--	--
2002	8,477	0	36,313	44,790	--	--
2003	8,073	0	36,609	44,682	--	--
2004	7,695	0	36,899	44,594	--	--
2005	7,341	0	37,127	44,468	--	--
2006	7,009	0	37,352	44,361	--	--
2007	6,697	0	37,557	44,254	--	--
2008	6,404	0	37,745	44,149	--	--
Projected Total	216,094	0	688,873	905,017	49,720	100,277
Florida Gas Transmission Co						
1989	130,270	112,500	18,263	261,033	--	--
1990	99,419	5,479	18,262	123,160	--	--
1991	80,984	0	18,262	99,246	--	--
1992	60,583	0	0	60,583	--	--
1993	38,456	0	0	38,456	--	--
1994	25,088	0	0	25,088	--	--
1995	22,958	0	0	22,958	--	--
1996	18,107	0	0	18,107	--	--
1997	14,113	0	0	14,113	--	--
1998	11,293	0	0	11,293	--	--
1999	8,765	0	0	8,765	--	--
2000	8,146	0	0	8,146	--	--
2001	6,338	0	0	6,338	--	--
2002	4,274	0	0	4,274	--	--
2003	3,695	0	0	3,695	--	--
2004	3,805	0	0	3,805	--	--
2005	2,299	0	0	2,299	--	--
2006	1,885	0	0	1,885	--	--
2007	1,598	0	0	1,598	--	--
2008	602	0	0	602	--	--
Projected Total	542,678	117,979	54,787	715,444	261,009	0
K N Energy Inc						
1989	76,031	0	3,370	79,401	--	--
1990	71,440	0	2,640	74,080	--	--
1991	66,659	0	2,165	68,824	--	--
1992	58,741	0	1,640	60,381	--	--
1993	51,737	0	1,640	53,377	--	--
1994	42,436	0	1,640	44,076	--	--
1995	37,559	0	1,640	39,199	--	--
1996	32,887	0	1,620	34,507	--	--
1997	29,151	0	1,600	30,751	--	--
1998	26,335	0	1,600	27,935	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
K N Energy Inc						
1999	24,830	0	1,600	26,430	--	--
2000	23,510	0	1,600	25,110	--	--
2001	22,303	0	1,600	23,903	--	--
2002	21,124	0	1,600	22,724	--	--
2003	19,773	0	1,600	21,373	--	--
2004	18,139	0	1,600	19,739	--	--
2005	16,580	0	1,600	18,180	--	--
2006	15,089	0	462	15,551	--	--
2007	13,005	0	300	13,305	--	--
2008	10,661	0	300	10,961	--	--
Projected Total	677,990	0	31,817	709,807	79,401	79,401
Kentucky West Va Gas Co						
1989	22,518	0	0	22,518	--	--
1990	22,518	0	0	22,518	--	--
1991	22,518	0	0	22,518	--	--
1992	22,518	0	0	22,518	--	--
1993	22,518	0	0	22,518	--	--
1994	22,518	0	0	22,518	--	--
1995	22,518	0	0	22,518	--	--
1996	22,518	0	0	22,518	--	--
1997	22,518	0	0	22,518	--	--
1998	22,518	0	0	22,518	--	--
1999	22,518	0	0	22,518	--	--
2000	22,518	0	0	22,518	--	--
2001	22,518	0	0	22,518	--	--
2002	20,712	0	0	20,712	--	--
2003	0	0	0	0	--	--
2004	0	0	0	0	--	--
2005	0	0	0	0	--	--
2006	0	0	0	0	--	--
2007	0	0	0	0	--	--
2008	0	0	0	0	--	--
Projected Total	313,446	0	0	313,446	22,518	0
Lone Star Gas Co Div Enserch Corp						
1989	16,498	0	0	16,498	--	--
1990	14,382	0	0	14,382	--	--
1991	12,415	0	0	12,415	--	--
1992	11,232	0	0	11,232	--	--
1993	7,505	0	0	7,505	--	--
1994	6,637	0	0	6,637	--	--
1995	4,996	0	0	4,996	--	--
1996	2,569	0	0	2,569	--	--
1997	2,255	0	0	2,255	--	--
1998	1,979	0	0	1,979	--	--
1999	1,740	0	0	1,740	--	--
2000	1,516	0	0	1,516	--	--
2001	1,349	0	0	1,349	--	--
2002	1,192	0	0	1,192	--	--
2003	998	0	0	998	--	--
2004	524	0	0	524	--	--
2005	440	0	0	440	--	--
2006	380	0	0	380	--	--
2007	313	0	0	313	--	--
2008	249	0	0	249	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Lone Star Gas Co Div Enserch Corp						
Projected Total	69,169	0	0	69,169	19,869	20,189
Louisiana-Nevada Transit Co						
1989	4,239	0	0	4,239	--	--
1990	4,211	0	0	4,211	--	--
1991	3,411	0	0	3,411	--	--
1992	6,976	0	0	6,976	--	--
1993	6,468	0	0	6,468	--	--
1994	5,292	0	0	5,292	--	--
1995	4,408	0	0	4,408	--	--
1996	3,657	0	0	3,657	--	--
1997	3,308	0	0	3,308	--	--
1998	3,038	0	0	3,038	--	--
1999	2,751	0	0	2,751	--	--
2000	429	0	0	429	--	--
2001	0	0	0	0	--	--
2002	0	0	0	0	--	--
2003	0	0	0	0	--	--
2004	0	0	0	0	--	--
2005	0	0	0	0	--	--
2006	0	0	0	0	--	--
2007	0	0	0	0	--	--
2008	0	0	0	0	--	--
Projected Total	48,188	0	0	48,188	2,727	0
Mid Louisiana Gas Co						
1989	19,750	0	0	19,750	--	--
1990	14,715	0	0	14,715	--	--
1991	12,759	0	0	12,759	--	--
1992	10,483	0	0	10,483	--	--
1993	8,589	0	0	8,589	--	--
1994	7,093	0	0	7,093	--	--
1995	5,697	0	0	5,697	--	--
1996	4,692	0	0	4,692	--	--
1997	3,887	0	0	3,887	--	--
1998	3,327	0	0	3,327	--	--
1999	2,873	0	0	2,873	--	--
2000	2,469	0	0	2,469	--	--
2001	2,059	0	0	2,059	--	--
2002	1,763	0	0	1,763	--	--
2003	1,546	0	0	1,546	--	--
2004	1,363	0	0	1,363	--	--
2005	1,170	0	0	1,170	--	--
2006	1,030	0	0	1,030	--	--
2007	920	0	0	920	--	--
2008	0	0	0	0	--	--
Projected Total	106,185	0	0	106,185	20,974	55,659

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Mississippi River Transmission Corp						
1989	150,848	3,500	1,302	155,650	--	--
1990	44,817	0	1,258	46,075	--	--
1991	41,016	0	1,149	42,165	--	--
1992	39,250	0	1,120	40,370	--	--
1993	17,148	0	1,075	18,223	--	--
1994	12,362	0	1,044	13,406	--	--
1995	9,953	0	799	10,752	--	--
1996	8,511	0	612	9,123	--	--
1997	6,951	0	441	7,392	--	--
1998	5,891	0	313	6,204	--	--
1999	4,889	0	232	5,121	--	--
2000	4,119	0	178	4,297	--	--
2001	3,249	0	144	3,393	--	--
2002	2,607	0	145	2,752	--	--
2003	2,187	0	96	2,283	--	--
2004	1,646	0	83	1,729	--	--
2005	1,257	0	72	1,329	--	--
2006	1,053	0	65	1,118	--	--
2007	684	0	59	743	--	--
2008	616	0	54	670	--	--
Projected Total	359,054	3,500	10,241	372,795	155,650	0
National Fuel Gas Supply Corp						
1989	20,782	0	*63,501	184,283	--	--
1990	20,804	0	125,603	146,407	--	--
1991	20,718	0	105,650	126,368	--	--
1992	20,798	0	105,650	126,448	--	--
1993	20,891	0	91,051	111,942	--	--
1994	18,900	0	91,051	109,951	--	--
1995	17,255	0	91,051	108,306	--	--
1996	15,874	0	91,051	106,925	--	--
1997	14,697	0	91,051	105,748	--	--
1998	13,683	0	91,051	104,734	--	--
1999	12,800	0	91,051	103,851	--	--
2000	12,023	0	91,051	103,074	--	--
2001	11,336	0	91,051	102,387	--	--
2002	10,723	0	0	10,723	--	--
2003	10,173	0	0	10,173	--	--
2004	9,676	0	0	9,676	--	--
2005	9,226	0	0	9,226	--	--
2006	8,816	0	0	8,816	--	--
2007	8,441	0	0	8,441	--	--
2008	8,099	0	0	8,099	--	--
Projected Total	285,715	0	1,319,863	1,605,578	150,117	0
Natural Gas Pipeline Co of America						
1989	213,668	70,431	99,671	383,770	--	--
1990	204,512	39,881	87,668	332,061	--	--
1991	156,613	17,564	30,110	204,287	--	--
1992	129,309	17,204	24,635	171,148	--	--
1993	89,305	9,909	19,161	118,375	--	--
1994	67,274	907	13,685	81,866	--	--
1995	57,266	428	9,125	66,819	--	--
1996	61,384	365	9,125	70,874	--	--
1997	49,271	314	9,125	58,710	--	--
1998	26,154	275	9,125	35,554	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Natural Gas Pipeline Co of America						
1999	21,142	223	9,125	30,490	--	--
2000	16,422	134	9,126	25,682	--	--
2001	6,776	0	9,125	15,901	--	--
2002	3,937	0	9,126	13,063	--	--
2003	2,522	0	9,125	11,647	--	--
2004	2,079	0	9,125	11,204	--	--
2005	1,708	0	9,125	10,833	--	--
2006	1,525	0	9,125	10,650	--	--
2007	1,354	0	9,125	10,479	--	--
2008	1,091	0	9,125	10,216	--	--
Projected Total	1,113,312	157,635	402,682	1,673,629	383,770	985,822
Northern Natural Div InterNorth Inc						
1989	269,860	1,564	74,896	346,320	--	--
1990	139,366	1,309	54,440	195,115	--	--
1991	126,831	1,109	54,440	182,380	--	--
1992	107,185	905	54,440	162,530	--	--
1993	86,570	755	45,922	133,247	--	--
1994	71,190	644	0	71,834	--	--
1995	60,674	548	0	61,222	--	--
1996	52,675	464	0	53,139	--	--
1997	46,754	401	0	47,155	--	--
1998	41,454	293	0	41,747	--	--
1999	36,479	199	0	36,678	--	--
2000	32,467	175	0	32,642	--	--
2001	29,219	131	0	29,350	--	--
2002	26,590	118	0	26,708	--	--
2003	24,462	105	0	24,567	--	--
2004	22,751	94	0	22,845	--	--
2005	21,385	84	0	21,469	--	--
2006	20,316	72	0	20,388	--	--
2007	19,503	65	0	19,568	--	--
2008	18,919	59	0	18,978	--	--
Projected Total	1,254,650	9,094	284,138	1,547,882	346,242	48,719
Northwest Pipeline Corp						
1989	133,380	0	37,088	170,468	--	--
1990	117,953	0	0	117,953	--	--
1991	95,253	0	0	95,253	--	--
1992	87,962	0	0	87,962	--	--
1993	81,389	0	0	81,389	--	--
1994	75,472	0	0	75,472	--	--
1995	70,124	0	0	70,124	--	--
1996	65,277	0	0	65,277	--	--
1997	60,872	0	0	60,872	--	--
1998	56,856	0	0	56,856	--	--
1999	53,187	0	0	53,187	--	--
2000	49,827	0	0	49,827	--	--
2001	46,744	0	0	46,744	--	--
2002	43,910	0	0	43,910	--	--
2003	41,298	0	0	41,298	--	--
2004	38,888	0	0	38,888	--	--
2005	36,658	0	0	36,658	--	--
2006	34,595	0	0	34,595	--	--
2007	32,681	0	0	32,681	--	--
2008	30,902	0	0	30,902	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Northwest Pipeline Corp						
Projected Total	1,253,228	0	37,088	1,290,316	84,058	124,400
Panhandle Eastern Pipe Line Co						
1989	88,557	4,088	100,008	192,653	--	--
1990	79,666	5,903	121,079	206,648	--	--
1991	66,578	7,261	99,068	172,907	--	--
1992	58,114	7,280	84,416	149,810	--	--
1993	48,626	7,261	75,080	130,967	--	--
1994	46,002	2,466	67,539	116,007	--	--
1995	37,275	0	45,111	82,386	--	--
1996	32,580	0	24,193	56,773	--	--
1997	28,629	0	7,032	35,661	--	--
1998	26,004	0	5,386	31,390	--	--
1999	23,531	0	4,024	27,555	--	--
2000	21,308	0	1,399	22,707	--	--
2001	19,134	0	1,002	20,136	--	--
2002	16,956	0	804	17,760	--	--
2003	15,238	0	651	15,889	--	--
2004	13,808	0	536	14,344	--	--
2005	12,558	0	354	12,912	--	--
2006	12,194	0	272	12,466	--	--
2007	10,948	0	221	11,169	--	--
2008	10,418	0	158	10,576	--	--
Projected Total	668,124	34,259	638,333	1,340,716	55,245	447,469
Questar Pipeline Company						
1989	39,716	12,689	545	52,950	--	--
1990	33,924	10,649	545	45,118	--	--
1991	29,371	8,986	545	38,902	--	--
1992	25,688	7,632	408	33,728	--	--
1993	22,628	6,511	0	29,139	--	--
1994	20,051	5,575	0	25,626	--	--
1995	17,824	4,558	0	22,382	--	--
1996	15,932	2,966	0	18,898	--	--
1997	14,297	2,659	0	16,956	--	--
1998	12,870	2,383	0	15,253	--	--
1999	11,640	2,138	0	13,778	--	--
2000	10,528	1,918	0	12,446	--	--
2001	9,555	1,721	0	11,276	--	--
2002	8,692	1,546	0	10,238	--	--
2003	7,942	1,388	0	9,330	--	--
2004	7,266	1,248	0	8,514	--	--
2005	6,651	1,122	0	7,773	--	--
2006	6,093	1,008	0	7,101	--	--
2007	5,596	907	0	6,503	--	--
2008	5,145	720	0	5,865	--	--
Projected Total	311,409	78,324	2,043	391,776	57,911	206,225

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Ringwood Gathering Co						
1989	7,609	0	0	7,609	--	--
1990	6,445	0	0	6,445	--	--
1991	5,460	0	0	5,460	--	--
1992	4,655	0	0	4,655	--	--
1993	3,938	0	0	3,938	--	--
1994	3,312	0	0	3,312	--	--
1995	2,846	0	0	2,846	--	--
1996	2,417	0	0	2,417	--	--
1997	2,059	0	0	2,059	--	--
1998	1,745	0	0	1,745	--	--
1999	0	0	0	0	--	--
2000	0	0	0	0	--	--
2001	0	0	0	0	--	--
2002	0	0	0	0	--	--
2003	0	0	0	0	--	--
2004	0	0	0	0	--	--
2005	0	0	0	0	--	--
2006	0	0	0	0	--	--
2007	0	0	0	0	--	--
2008	0	0	0	0	--	--
Projected Total	40,486	0	0	40,486	1,815	0
Sea Robin Pipeline Co						
1989	1,010	0	0	1,010	--	--
1990	1,010	0	0	1,010	--	--
1991	1,010	0	0	1,010	--	--
1992	1,010	0	0	1,010	--	--
1993	1,010	0	0	1,010	--	--
1994	1,010	0	0	1,010	--	--
1995	1,010	0	0	1,010	--	--
1996	1,010	0	0	1,010	--	--
1997	1,010	0	0	1,010	--	--
1998	1,010	0	0	1,010	--	--
1999	1,010	0	0	1,010	--	--
2000	1,010	0	0	1,010	--	--
2001	1,010	0	0	1,010	--	--
2002	1,010	0	0	1,010	--	--
2003	1,010	0	0	1,010	--	--
2004	1,010	0	0	1,010	--	--
2005	1,010	0	0	1,010	--	--
2006	1,010	0	0	1,010	--	--
2007	1,010	0	0	1,010	--	--
2008	1,010	0	0	1,010	--	--
Projected Total	20,200	0	0	20,200	1,010	334,705
Southern Natural Gas Co						
1989	315,743	0	0	315,743	--	--
1990	267,140	0	0	267,140	--	--
1991	221,762	0	0	221,762	--	--
1992	161,655	0	0	161,655	--	--
1993	107,079	0	0	107,079	--	--
1994	69,247	0	7,300	76,547	--	--
1995	45,541	0	7,300	52,841	--	--
1996	27,699	0	7,320	35,019	--	--
1997	16,471	0	7,300	23,771	--	--
1998	13,696	0	0	13,696	--	--

Table 18. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Southern Natural Gas Co						
1999	10,625	0	0	10,625	--	--
2000	8,484	0	0	8,484	--	--
2001	7,070	0	0	7,070	--	--
2002	8,417	0	0	8,417	--	--
2003	10,435	0	0	10,435	--	--
2004	6,858	0	0	6,858	--	--
2005	4,368	0	0	4,368	--	--
2006	1,030	0	0	1,030	--	--
2007	966	0	0	966	--	--
2008	902	0	0	902	--	--
Projected Total	1,305,188	0	29,220	1,334,408	135,000	809,271
Tennessee Gas Pipeline Div Tenneco						
1989	746,664	0	59,933	806,597	--	--
1990	663,160	0	62,856	726,016	--	--
1991	466,261	0	63,365	529,626	--	--
1992	337,060	0	63,262	400,322	--	--
1993	237,829	0	103,110	340,939	--	--
1994	167,992	0	97,606	265,598	--	--
1995	117,712	0	91,871	209,583	--	--
1996	85,037	0	86,396	171,433	--	--
1997	59,733	0	79,388	139,121	--	--
1998	39,132	0	67,233	106,365	--	--
1999	30,194	0	65,408	95,602	--	--
2000	22,334	0	16,717	39,051	--	--
2001	17,172	0	15,440	32,612	--	--
2002	13,071	0	15,440	28,511	--	--
2003	9,932	0	15,440	25,372	--	--
2004	6,748	0	15,440	22,188	--	--
2005	5,067	0	15,440	20,507	--	--
2006	3,907	0	15,440	19,347	--	--
2007	3,316	0	15,440	18,756	--	--
2008	2,470	0	7,220	9,690	--	--
Projected Total	3,034,791	0	972,445	4,007,236	313,176	1,219,909
Texas Eastern Transmission Corp						
1989	715,664	0	172,829	888,493	--	--
1990	475,560	0	172,463	648,023	--	--
1991	366,671	0	165,559	532,230	--	--
1992	268,253	0	158,775	427,028	--	--
1993	183,750	0	158,775	342,525	--	--
1994	122,150	0	158,775	280,925	--	--
1995	100,656	0	158,775	259,431	--	--
1996	78,390	0	158,775	237,165	--	--
1997	59,053	0	158,775	217,828	--	--
1998	44,343	0	158,775	203,118	--	--
1999	30,387	0	158,775	189,162	--	--
2000	21,263	0	158,775	180,038	--	--
2001	14,530	0	158,775	173,305	--	--
2002	10,251	0	158,775	169,026	--	--
2003	7,364	0	158,775	166,139	--	--
2004	5,415	0	158,775	164,190	--	--
2005	1,716	0	158,775	160,491	--	--
2006	1,325	0	158,775	160,100	--	--
2007	1,221	0	158,775	159,996	--	--
2008	981	0	158,775	159,756	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Texas Eastern Transmission Corp						
Projected Total	2,508,943	0	3,210,026	5,718,969	688,977	1,092,925
Texas Gas Transmission Corp						
1989	235,418	0	78,096	313,514	--	--
1990	201,781	0	78,096	279,877	--	--
1991	153,245	0	78,096	231,341	--	--
1992	103,773	0	78,096	181,869	--	--
1993	76,457	0	78,096	154,553	--	--
1994	59,444	0	78,096	137,540	--	--
1995	42,658	0	78,096	120,754	--	--
1996	35,356	0	78,096	113,452	--	--
1997	28,567	0	78,096	106,663	--	--
1998	22,445	0	78,096	100,541	--	--
1999	19,157	0	73,135	92,292	--	--
2000	15,610	0	68,522	84,132	--	--
2001	11,469	0	63,726	75,195	--	--
2002	8,433	0	59,264	67,697	--	--
2003	7,421	0	55,117	62,538	--	--
2004	6,530	0	51,258	57,788	--	--
2005	5,747	0	47,670	53,417	--	--
2006	5,057	0	44,333	49,390	--	--
2007	4,450	0	41,229	45,679	--	--
2008	2,483	0	38,334	40,817	--	--
Projected Total	1,045,501	0	1,323,548	2,369,049	184,589	762,244
Transcontinental Gas Pipe Line Corp						
1989	892,959	0	13,096	906,055	--	--
1990	667,663	0	12,939	680,602	--	--
1991	416,328	0	12,511	428,839	--	--
1992	271,153	0	12,078	283,231	--	--
1993	185,627	0	12,012	197,639	--	--
1994	129,938	0	0	129,938	--	--
1995	84,316	0	0	84,316	--	--
1996	53,678	0	0	53,678	--	--
1997	36,677	0	0	36,677	--	--
1998	25,719	0	0	25,719	--	--
1999	18,083	0	0	18,083	--	--
2000	12,597	0	0	12,597	--	--
2001	8,882	0	0	8,882	--	--
2002	7,357	0	0	7,357	--	--
2003	6,372	0	0	6,372	--	--
2004	4,887	0	0	4,887	--	--
2005	3,723	0	0	3,723	--	--
2006	2,865	0	0	2,865	--	--
2007	2,262	0	0	2,262	--	--
2008	1,431	0	0	1,431	--	--
Projected Total	2,832,517	0	62,636	2,895,153	825,000	1,127,424

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Transwestern Pipeline Co						
1989	122,947	0	0	122,947	--	--
1990	122,949	0	0	122,949	--	--
1991	100,775	0	0	100,775	--	--
1992	79,668	0	0	79,668	--	--
1993	63,451	0	0	63,451	--	--
1994	50,144	0	0	50,144	--	--
1995	40,174	0	0	40,174	--	--
1996	32,757	0	0	32,757	--	--
1997	27,674	0	0	27,674	--	--
1998	22,545	0	0	22,545	--	--
1999	18,859	0	0	18,859	--	--
2000	16,282	0	0	16,282	--	--
2001	14,126	0	0	14,126	--	--
2002	12,177	0	0	12,177	--	--
2003	10,690	0	0	10,690	--	--
2004	9,272	0	0	9,272	--	--
2005	8,092	0	0	8,092	--	--
2006	7,182	0	0	7,182	--	--
2007	6,229	0	0	6,229	--	--
2008	3,972	0	0	3,972	--	--
Projected Total	769,967	0	0	769,967	122,921	0
Trunkline Gas Co						
1989	173,124	0	0	173,124	--	--
1990	140,529	0	0	140,529	--	--
1991	93,358	0	0	93,358	--	--
1992	61,954	0	0	61,954	--	--
1993	42,134	0	0	42,134	--	--
1994	32,717	0	0	32,717	--	--
1995	23,938	0	0	23,938	--	--
1996	18,380	0	0	18,380	--	--
1997	14,296	0	0	14,296	--	--
1998	10,874	0	0	10,874	--	--
1999	8,052	0	0	8,052	--	--
2000	2,460	0	0	2,460	--	--
2001	1,680	0	0	1,680	--	--
2002	1,315	0	0	1,315	--	--
2003	1,053	0	0	1,053	--	--
2004	846	0	0	846	--	--
2005	497	0	0	497	--	--
2006	348	0	0	348	--	--
2007	270	0	0	270	--	--
2008	151	0	0	151	--	--
Projected Total	627,976	0	0	627,976	151,318	582,090
United Gas Pipe Line Co						
1989	26,888	0	15,105	41,993	--	--
1990	41,488	0	505	41,993	--	--
1991	41,488	0	505	41,993	--	--
1992	41,488	0	505	41,993	--	--
1993	41,488	0	505	41,993	--	--
1994	41,488	0	505	41,993	--	--
1995	31,477	0	505	31,982	--	--
1996	23,258	0	505	23,763	--	--
1997	16,366	0	505	16,871	--	--
1998	11,699	0	505	12,204	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
United Gas Pipe Line Co						
1999	6,372	0	505	6,877	--	--
2000	6,233	0	505	6,738	--	--
2001	5,101	0	505	5,606	--	--
2002	5,292	0	505	5,797	--	--
2003	3,199	0	505	3,704	--	--
2004	2,644	0	505	3,149	--	--
2005	2,231	0	505	2,736	--	--
2006	1,919	0	505	2,424	--	--
2007	1,657	0	505	2,162	--	--
2008	1,429	0	505	1,934	--	--
Projected Total	355,205	0	24,700	379,905	41,993	2,000,565
West Texas Gathering Co						
1989	0	0	0	0	--	--
1990	0	0	0	0	--	--
1991	0	0	0	0	--	--
1992	3,283	0	0	3,283	--	--
1993	2,307	0	0	2,307	--	--
1994	1,700	0	0	1,700	--	--
1995	1,299	0	0	1,299	--	--
1996	955	0	0	955	--	--
1997	742	0	0	742	--	--
1998	572	0	0	572	--	--
1999	458	0	0	458	--	--
2000	382	0	0	382	--	--
2001	265	0	0	265	--	--
2002	195	0	0	195	--	--
2003	164	0	0	164	--	--
2004	143	0	0	143	--	--
2005	121	0	0	121	--	--
2006	111	0	0	111	--	--
2007	103	0	0	103	--	--
2008	98	0	0	98	--	--
Projected Total	12,898	0	0	12,898	15,577	69,350
Williams Natural Gas Co						
1989	103,845	0	2,057	105,902	--	--
1990	107,142	0	1,815	108,957	--	--
1991	96,269	0	1,815	98,084	--	--
1992	111,121	0	1,820	112,941	--	--
1993	101,846	0	1,815	103,661	--	--
1994	100,386	0	1,815	102,201	--	--
1995	98,942	0	1,815	100,757	--	--
1996	97,440	0	1,820	99,260	--	--
1997	95,961	0	1,815	97,776	--	--
1998	94,494	0	1,815	96,309	--	--
1999	90,572	0	1,815	92,387	--	--
2000	87,495	0	1,820	89,315	--	--
2001	81,780	0	1,815	83,595	--	--
2002	76,119	0	1,815	77,934	--	--
2003	72,855	0	1,815	74,670	--	--
2004	69,676	0	1,820	71,496	--	--
2005	63,710	0	1,815	65,525	--	--
2006	58,260	0	1,200	59,460	--	--
2007	53,332	0	0	53,332	--	--
2008	48,819	0	0	48,819	--	--

Table 16. Deliverability Summaries: Estimated Annual Volumes (Continued)
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
Williams Natural Gas Co						
Projected Total	1,710,064	0	32,317	1,742,381	105,902	0
Williston Basin Interstate Pipeline						
1989	25,559	0	0	25,559	--	--
1990	22,128	0	0	22,128	--	--
1991	17,522	0	0	17,522	--	--
1992	10,630	0	0	10,630	--	--
1993	7,968	0	0	7,968	--	--
1994	7,960	0	0	7,960	--	--
1995	6,340	0	0	6,340	--	--
1996	5,680	0	0	5,680	--	--
1997	5,305	0	0	5,305	--	--
1998	5,080	0	0	5,080	--	--
1999	4,540	0	0	4,540	--	--
2000	4,090	0	0	4,090	--	--
2001	3,680	0	0	3,680	--	--
2002	3,310	0	0	3,310	--	--
2003	2,980	0	0	2,980	--	--
2004	2,680	0	0	2,680	--	--
2005	2,410	0	0	2,410	--	--
2006	2,170	0	0	2,170	--	--
2007	1,955	0	0	1,955	--	--
2008	1,760	0	0	1,760	--	--
Projected Total	143,747	0	0	143,747	25,559	0

Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Table 17. Composite Deliverability Projections[a]
(Million Cubic Feet)

Year	Owned and Contracted	Other Supply Contracts	Interstate Pipeline Purchases	Total	Annual Requirement	Total Certificate Requirement
1989	6,496,492	205,180	1,770,934	8,472,606	–	–
1990	5,356,331	63,629	1,600,530	7,020,490	–	–
1991	4,315,669	35,328	1,492,587	5,843,584	–	–
1992	3,576,458	33,429	1,438,081	5,047,968	–	–
1993	2,924,415	24,844	1,429,366	4,378,625	–	–
1994	2,423,338	10,000	1,361,067	3,794,405	–	–
1995	2,014,993	5,942	1,328,819	3,349,754	–	–
1996	1,706,794	4,203	1,304,866	3,015,863	–	–
1997	1,440,166	3,782	1,278,925	2,722,873	–	–
1998	1,237,639	3,359	1,258,162	2,499,160	–	–
1999	1,070,784	2,968	1,250,348	2,324,100	–	–
2000	943,427	2,635	1,196,835	2,142,897	–	–
2001	822,294	2,260	1,188,764	2,013,368	–	–
2002	738,846	2,072	1,093,230	1,834,146	–	–
2003	654,496	1,901	1,089,176	1,745,573	–	–
2004	593,577	1,750	1,087,549	1,682,876	–	–
2005	524,744	1,614	1,081,926	1,608,284	–	–
2006	462,285	1,488	1,076,972	1,540,745	–	–
2007	405,045	1,380	1,072,654	1,479,079	–	–
2008	360,484	1,187	1,063,724	1,425,395	–	–
Projected Total	38,068,277	408,951	25,464,515	63,941,793	5,736,589	12,293,679

[a] Interstate Pipelines required to file Schedule I of the Form 15. Includes 35 pipeline companies with both company-owned and contracted reserves. See Appendix 3.

Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

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Pipeline Imports

Interstate pipeline companies required to file Form 15 reported imports of natural gas into the United States of 889,832 million cubic feet from Canada during 1988. Imports from Mexico have been zero since 1985.

The remaining gas supply under contract between Form 15 respondents and Canadian firms decreased by 1.7 percent, from 9.8 trillion cubic feet in 1987 to 9.7 trillion cubic feet in 1988. In comparison, the Mexican gas supply remaining under contract remained constant at 0.4 trillion cubic feet in 1988 (Table 18).

The importation of natural gas from Canada continues to be an important part of the interstate pipeline companies' actions to procure supplemental supplies of natural gas to augment domestic gas supply.

A crew unloading 42-inch diameter pipe near Sandpoint, Idaho.

Table 18. Pipeline Imports
(Million Cubic Feet)

Importing Company	1987	1988
Canadian Gas		
Contracted Gas Supply		
ANR Pipeline Co	51,700	33,450
Boundary Gas Inc	262,095	229,583
Granite State Gas Transmission Inc	94,290	89,725
Great Lakes Gas Transmission Co	327,362	222,910
Inter-City Minnesota Pipelines Ltd	95,870	56,371
Midwestern Gas Transmission Co	441,164	349,681
Natural Gas Pipeline Co of America	88,375	104,925
Northern Natural Div InterNorth Inc	58,008	20,457
Northwest Alaskan Pipeline Co	5,167,280	6,130,800
Northwest Pipeline Corp	470,339	37,088
Pacific Gas Transmission Co	2,356,820	1,974,868
Pacific Offshore Pipeline Co	175,200	0
Tennessee Gas Pipeline Div Tenneco	186,600	379,705
Texas Eastern Transmission Corp	52,324	34,160
Total	9,827,427	9,663,723
Annual Imports		
ANR Pipeline Co	1,159	0
Boundary Gas Inc	0	32,317
Granite State Gas Transmission Inc	231	2,240
Great Lakes Gas Transmission Co	51,125	93,833
Inter-City Minnesota Pipelines Ltd	3,483	4,211
Midwestern Gas Transmission Co	11,394	22,654
Natural Gas Pipeline Co of America	6,023	28,096
Northern Natural Div InterNorth Inc	40,073	47,008
Northwest Alaskan Pipeline Co	170,413	210,465
Northwest Pipeline Corp	63,078	30,367
Pacific Gas Transmission Co	367,833	381,953
Pacific Offshore Pipeline Co	10,425	0
Tennessee Gas Pipeline Div Tenneco	20,906	18,524
Texas Eastern Transmission Corp	8,444	18,164
Total	754,587	869,832
Mexican Gas		
Contracted Gas Supply		
Border Gas Inc	352,922	352,922
Total	352,922	352,922
Annual Imports		
Total	0	0

Source: Energy Information Administration, FERC Form 15, "Interstate Pipeline's Annual Report of Gas Supply."

Appendix A

Summary of Data Collection Operations and Report Methodology

Appendix A

Summary of Data Collection Operations and Report Methodology

Data for the *Gas Supplies of Interstate Natural Gas Pipeline Companies 1988*, are based on the FERC Form 15, "Interstate Pipelines' Annual Report of Gas Supply." This form is filed annually on April 1 of the year following the report year.

Survey Design

The survey was implemented in 1963 by the FPC. The FERC assumed jurisdictional authority for the survey on October 1, 1977, as a result of the Department of Energy Organization Act; and simultaneously the EIA was given the responsibility for the collection, processing, and publication of the data gathered by the survey.

The survey universe varies slightly from year to year. The FERC required 79 interstate pipeline companies to file Form 15 in 1989 for report year 1988. On December 15, 1988, the Reserves and Natural Gas Division of the Office of Oil and Gas, EIA, mailed report year 1988 forms to all respondents identified by the FERC. Completed forms and machine-readable submissions were returned to the Reserves and Natural Gas Division where they were processed.

Response Statistics

Data for the report year 1988 were due April 1, 1989. The response rate as of April 13, 1989, was approximately 86 percent. Extensions of up to 30 days are generally granted upon receipt of a formal written request provided the respondent is not currently involved in FERC hearings.

Approximately 2 percent of the respondents submitted an amended Form 15 to correct major reporting errors. An additional 2 percent resubmitted partial data to replace erroneous data submitted initially. The final response rate was 100 percent.

Respondents may file on magnetic tape provided that a printout reasonably conforming in format to the Form 15 is also filed. All major companies submitted their 1988 data on magnetic tape or other electronic media.

Summary of Data Reporting Requirements

The FERC Form 15 (see Figure A1) is a multipage form consisting of seven major parts. Additionally, as part of the filing requirement, each company is required to submit a general map covering the producing areas traversed by the pipeline system and a map for each field unless previously submitted. The major parts of the form include an Identification Schedule, Synopsis of Gas Supply, Disclosure of Other Gas Supply Filings with Federal Agencies, Gas Procurement Activity Statement, Schedule I, Schedule II, and Footnote Data. Companies that have year-end remaining recoverable reserves of more than 50 billion cubic feet of company-owned and independent producer contract reserves are required to complete the entire form and provide the specified maps. The remaining respondents are required to file only the Identification Schedule, the Synopsis of Gas Supply, and Schedule II. Companies that act as transporters only are required to file a statement providing the names and addresses of the company or companies for which gas is transported.

The data provided in this report are derived from the Synopsis of Gas Supply, Schedule I, and Schedule II. The Synopsis of Gas Supply and the Schedule I contain summary level reserves and production data reflective of the detail information contained in Schedule II. The Synopsis of Gas Supply and the Schedule I consist of a single page for each. All volumes reported on these

two forms are on a dry basis at 14.73 psia and 60 degrees Fahrenheit.

Each source of supply is reported in Schedule II. The Schedule II format allows a maximum of five sources to be reported on each page, therefore Schedule II submissions may vary from one page to many.

Data Quality Assurance Procedures

Individual company reports were initially reviewed by analysts to check for correct reporting procedures, proper format, correct company identification, and data consistency between the Synopsis of Gas Supply, Schedule I, and, for small companies, Schedule II. Data completeness and intraschedule consistency checking were also performed. Errors were detected in 44 percent of the submissions during this review phase. Each respondent whose submission contained an error was contacted by telephone and informed of the error and instructed on the correct filing procedure. If corrections were determined to be extensive, the respondent was asked to prepare and submit an amended Form 15 or the portions thereof which were in error.

Following conclusion of the manual review phase, edits were performed to insure that gas supply sources were properly identified and that mathematical calculations were correct and consistent within and between schedules. Errors were detected in 74 percent of the submissions during the automated editing phase of form review. Respondents whose filings were found to contain errors were telephoned for problem resolution.

Comparison of the Form 15 with Other Data Sources

The Form 15 data on imports from Canada and Mexico (Table 18) were compared with data collected on the FPC Form 14 and published in the *Natural Gas Monthly*.[3] There are differences between the reports due to the fact that the Form 15 is submitted earlier than the FPC-14, and the FERC-15 reports estimated volumes while the FPC-14 is filed later and reports the final volumes.

[3]Energy Information Administration, "U.S. Imports and Exports of Natural Gas, 1988," *Natural Gas Monthly*, July 1989, DOE/EIA-0130(89/07), (Washington, D.C. September 1989).

FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Identification Schedule

IDENTIFICATION

1. Exact Legal Name of Respondent (Company)	2. Company Code	3. Report Year 19[ ][ ]
4. Address of Principal Business Office at End of Report Year (Street, City, State, Zip Code)		
5. Name of Contact Person	6. Title of Contact Person	
7. Address of Contact Person (Street, City, State, Zip Code)		
8 Telephone of Contact Person (Including Area Code)	9. Date of Submission (Mo, Da, Yr) Mo [ ][ ] Da [ ][ ] Yr [ ][ ]	

10. What is the total number of pages submitted for each schedule?

Schedule (01)	Page Number (02)	Total Number of Pages (03)
(1) Synopsis of Gas Supply	0002	
(2) Disclosure of Other Gas Supply Filings with Federal Agencies	0003	
(3) Gas Procurement Activity Statement	0004	
(4) Schedule I: System Deliverability Summary		
(5) Schedule II: Committed Reserves and Deliverability Estimates for All Supply Sources		
(6) Footnote Data		
(7) Pipeline System Maps *(See instructions)*		

CERTIFICATION

The undersigned certifies that he/she has examined the Synopsis of Gas Supply and the accompanying report; that to the best of his/her knowledge, information, and belief; all statement of fact contained in said report are true and the said report is a correct statement of the gas supply of the above-named respondent in respect to each and every matter set forth therein during the period from and including January 1 to and including December 31 of the report year.

11. Name	12. Title	13. Signature	14. Date Signed (Mo, Da, Yr)

Title 18, U.S.C. 1001, makes it a crime for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fradulent statements as to any matter within its jurisdiction.

FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Synopsis of Gas Supply

000

Company Code	Company Name (35)	Report Year 19	Date of Submission (Mo, Da, Yr)	Footnote Made For This Page ☐ Yes

01	Enter the class of Natural Gas Company, as defined in the "Uniform System of Accounts for Natural Gas Companies." *(See Sources for Codes Used in the instructions)*	
02	Enter the estimated total volume of remaining salable gas supply at the end of the current report year. *(See definition of Gas Supply)*	*(Enter volume)*
03	Enter the total new reserve additions that are reported for the first time in the current report year. *(See definition of Reserve Additions)*	
04	Enter the total new reserve additions acquired through new gas purchase contracts with independent producers during the current report year. *(See definition of Producer Contracted Reserves)*	
05	Enter the total revisions (increases or decreases) to the previous reserve estimates made during the current report year. *(See definition of Revisions)*	+ / -
06	Enter the total volume of company owned recoverable gas in underground storage facilities at the end of the current report year. *(See definitions of Owned Reserves and Underground Storage)*	
07	Enter the gas balance due from exchange agreements (positive or negative) at the end of the current report year. *(See definition of Exchange Agreements)*	+ /-

FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Disclosure of Other Gas Supply Filings with Federal Agencies

Company Code	Company Name (35)	Report Year	Date of Submission (Mo, Da, Yr)	Footnote Made For This Page
		19		☐ Yes

Identify below any public filings concerning the pipeline respondent's total system gas supplies made with other Federal Governmental Agencies by the respondent, its parent or affiliate, after the April 1 filing of the respondent's FERC Form No. 15 for the preceding year of report. (Affiliates are companies or persons that directly or indirectly, through one or more intermediaries, control or are controlled by, or are under control with the respondent company.) Reconciliation is required for that portion of the gas supply data included in the other filing(s) representing the gas supply belonging to the respondent which is different from that reported in the current FERC Form No. 15 filing. If more space is needed, use copies of this schedule.

Line No.	Name of Filing Party *(Enter full name)* (01)	Name and/or Date of Report (02)	Formal Name of Recipient Government Agency (03)	Reconciliation of Any Gas Reserve Differences *(Explain)* (04)
01				
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FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Gas Procurement Activity Statement

Company Code	Company Name (35)	Report Year 19	Date of Submission (Mo, Da, Yr)	Footnote Made For This Page ☐ Yes

Line No.	
01	*Provide a general statement of the company's gas procurement activity. Identify and include a description of any anticipated future supply additions from pending certificates. Include a general statement concerning current contract negotiations; producer option agreements; advance payment agreements; negotiations with foreign suppliers; construction of facilities to produce, or contracts for, supplies of LNG, SNG, or coal gas; or any other activities to add gas supplies. Also include a statement of the status of exploration and development activity in, or near, the general producing areas traversed by or available to the pipeline system to provide information to be relied upon by respondent with respect to applications for certificates under Section 7(c) of the Natural Gas Act.*
02	
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FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Schedule I

System Deliverability Summary

(See the Instructions for the filing requirements of this Schedule.)

100

Company Code	Company Name (35)	Report Year 19	Date of Submission (Mo, Da, Yr)	Footnote Made For This Page ☐ Yes

CURRENT GAS SUPPLY

Line No.	Item (00)	Owned (10) (01)	Producer Contracted (10) (02)	Other Supply Contracts (10) (03)	Interstate Pipeline Purchases (10) (04)	Total (10) *(Enter total of 01, 02, 03 and 04)* (05)
101	Reserves & Other Supply					
102	Volume Purchased and/or Produced					

DELIVERABILITY FORECAST

Line No.	Projected Year (00)	Annual Volume Scheduled: Owned and Producer Contracted (10) (01)	Annual Volume Scheduled: Other Supply Contracts (10) (02)	Annual Volume Scheduled: Interstate Pipeline Purchases (10) (03)	Total (10) *(Enter total of 01, 02, and 03)* (04)	Annual Requirement (10) (05)	Total Certificate Requirement (10) (06)
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
121							
122							
123	TOTAL						

TOTAL REMAINING RESERVES

124	125	126	127
Enter the result of the total of line 101, columns 01, 02 minus line 123, column 01 ((01 + 02) −01)	Enter the result of line 101, column 03 minus line 123, column 02.	Enter the result of line 101, column 04 minus line 123, column 03.	Enter the result of line 101, column 05 minus line 123, column 04.

FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Schedule II

Committed Reserves and Deliverability Estimates For All Supply Sources

(See the Instructions for filing requirements of this schedule. If more space is needed, use copies of this schedule. Note how Columns A through E of lines 206 to 226 correspond to lines 201 to 205.)

200

Company Code	Company Name (35)	Report Year	Date of Submission (Mo, Da, Yr)	Footnote Made For This Page
		19		☐ Yes

Line No. (00)	Column Alpha (00)	Group (or Field) Code (01)	Group (or Field) Name (26) (02)	Supply Code Type (03)	Supply Code Class (04)	Supply Code Term (05)	State Abb. (06)	County/Parish Code (07)	County/Parish Name (16) (08)	Pipeline (or Seller) Name (26) (09)
201	A									
202	B									
203	C									
204	D									
205	E									

Line No. (00)	Reserves *(Enter in MMCF)* (01)	Column A (for line 201) (02)	Column B (for line 202) (03)	Column C (for line 203) (04)	Column D (for line 204) (05)	Column E (for line 205) (06)
206	Are lines 207 to 209 on a dedicated basis only? *(Enter yes or no)*					
207	Initial Recoverable Wet Gas					
208	Cumulative Wet Gas Production					
209	Remaining Recoverable Wet Gas					
210	Fuel and Shrinkage Factor					
211	Owned and Contracted Remaining Dry Gas					
212	Owned and Contracted Report Year Dry Gas Production/Purchases					
213	Approximate Heating Value (In Btu)					
214	Company Owned Remaining Dry Gas					
215	Company Owned Report Year Dry Gas Production					
216	Additions During Report Year					
217	Net Revisions During Report Year					
218	Owned and Contracted Remaining Nonassociated Dry Gas					
219	Total Number of Reservoirs					
220	Number of Nonproducing Reservoirs					
221	Remaining Total Dry Gas In Nonproducing Reservoirs					
222	Estimated Annual Scheduled Volume – First Year					
223	Estimated Annual Scheduled Volume – Second Year					
224	Estimated Annual Scheduled Volume – Third Year					
225	Estimated Annual Scheduled Volume – Fourth Year					
226	Estimated Annual Scheduled Volume – Fifth Year					

Page ☐ Supplemental Sheet No ☐

FERC FORM NO. 15: INTERSTATE PIPELINE'S ANNUAL REPORT OF GAS SUPPLY

Footnote Data

(Refer to Specific Instructions before completing this schedule. If more space is needed, use copies of this schedule.)

Company Code	Company Name (35)	Report Year 19	Date of Submission (Mo, Da, Yr)

Line No.	Page Number (01)	Supplemental Sheet Number (02)	Data Reference No.		Classification (05)	Foot-note (06)	Footnote Sequence Number (07)	Footnote Code (08)	Footnote Message (09)
			Line No. (03)	Column or Item No. (04)					
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Appendix B

Index of Jurisdictional Companies

Appendix B

Index of Jurisdictional Companies

Appendix B is an index of interstate pipeline companies subject to the jurisdiction of the FERC under the Natural Gas Act that were required to file the 1988 annual report of gas supply in accordance with the requirements of Section 260.7 of the regulations of the FERC (18 CFR 260.7).

Natural gas pipeline companies that have year-end remaining recoverable reserves of more than 50 billion cubic feet of company-owned and independent producer contract reserves, at 14.73 psia and 60 degrees Fahrenheit, are required to complete the entire Form 15 in accordance with Part IV of "General Information" of the "General Instructions." The 35 companies meeting this criterion are as follows:

ANR Pipeline Company

Arkla Incorporated

Carnegie Natural Gas Company

CNG Transmission Corporation

Colorado Interstate Gas Company

Columbia Gas Transmission Corporation

El Paso Natural Gas Company

Equitrans Incorporated

Florida Gas Transmission Company

Kentucky West Virginia Gas Company

K N Energy Incorporated

Lone Star Gas Company Division Enserch Corporation

Louisiana-Nevada Transit Company

Mid Louisiana Gas Company

Mississippi River Transmission Corpo ion

National Fuel Gas Supply Corporation

Natural Gas Pipeline Company of America

Northern Natural Division InterNorth Incorporated

Northwest Pipeline Corporation

Panhandle Eastern Pipe Line Company

Questar Pipeline Company

Ringwood Gathering Company

Sea Robin Pipeline Company

Southern Natural Gas Company

Tennessee Gas Pipeline Division Tenneco

Texas Eastern Transmission Corporation

Texas Gas Transmission Corporation

Transcontinental Gas Pipe Line Corporation

Transwestern Pipeline Company

Trunkline Gas Company

United Gas Pipe Line Company

Valero Interstate Transmission Company

West Texas Gathering Company

Williams Natural Gas Company

Williston Basin Interstate Pipeline

Natural gas pipeline companies subject to the provisions noted at the beginning of this appendix having year-end remaining, recoverable, salable reserves consisting of 50 billion cubic feet or less of company-owned and independent producer contract reserves at 14.73 psia and 60 degrees Fahrenheit or which purchase their entire supply of gas from another interstate pipeline company, foreign supplier, or supplemental gas source, complete only the Identification Schedule (page 0001), the Synopsis of Gas Supply (page 0002), and Schedule II of Form 15 in accordance with Part IV of "General Information" of the "General Instructions." The companies meeting these criteria are:

Alabama-Tennessee Natural Gas Company
Algonquin Gas Transmission Company[4]
Arkansas Oklahoma Gas Corporation
Associated Natural Gas Company[4]
Bayou Interstate Pipeline System
Bluefield Gas Company[4]
Border Gas Incorporated[4]
Boundary Gas Incorporated[4]
Caprock Pipeline Company
Cimarron Transmission Company
East Tennessee Natural Gas Company
Eastern Shore Natural Gas Company
Gas Transport Incorporated
Glacier Gas Company[4]
Granite State Gas Transmission Incorporated[4]
Great Lakes Gas Transmission Company[4]
Great Plains Natural Gas Company[4]
Indiana Utilities Corporation[4]
Inland Gas Company Incorporated
Inter-City Minnesota Pipelines Limited[4]
International Paper Company
Interstate Power Company[4]
Iowa-Illinois Gas & Electric Company[4]
Michigan Gas Storage Company
Midwestern Gas Transmission Company
MIGC, Incorporated
North Penn Gas Company
Northwest Alaskan Pipeline Company[4]
Ohio River Pipeline Corporation[4]
Orange and Rockland Utilities Incorporated
Pacific Gas Transmission Company
Pacific Interstate Offshore Company
Pacific Interstate Transmission Company
Pacific Offshore Pipeline Company
Paiute Pipeline Company[4]
Pennsylvania & Southern Gas Company
Raton Gas Transmission Co Inc[4]
South Georgia Natural Gas Company[4]
South Penn Gas Company[4]
Texas Gas Pipeline Corporation
Valley Gas Transmission Incorporated
Washington Gas Light Company
Western Gas Interstate Company
Zenith Natural Gas Company

[4]Purchased their entire 1988 gas supply from other interstate pipeline companies or foreign suppliers.

Transporters of natural gas are exempt from filing Form 15; however, they are required by the FERC to file a letter, in lieu of the form, listing the name and address of each company for which they transported gas during the report year. Letters were received from the following companies:

Mitco Pipeline Company

Northern Border Pipeline Company

Overthrust Pipeline Company

Pelican Interstate Pipeline System

Union Light, Heat & Power Company

Western Transmission Corporation

Wyoming Interstate Company, Ltd

Appendix C

State Subdivisions

Appendix C

State Subdivisions

Louisiana

Northern Louisiana

All of Louisiana north of the 31st parallel including these counties:

Avoyelles	Franklin	Rapides
Bienville	Grant	Red River
Bossier	Jackson	Richland
Caddo	La Salle	Sabine
Caldwell	Lincoln	Tensas
Catahoula	Madison	Union
Claiborne	Morehouse	Vernon
Concordia	Natchitoches	Webster
De soto	Ouachita	West Carroll
East Carroll	Pointe Coupee	Winn

Southern Louisiana

Southern Louisiana - Onshore

Includes all of Louisiana south of the 31st parallel including all or part of the following counties:

Acadia	Iberville	St. James
Allen	Jefferson	St. John the Baptist
Ascension	Jefferson Davis	St. Landry
Assumption	Lafayette	St. Martin
Avoyelles	La Fourche	St. Mary
Beauregard	Livingston	St. Tammany
Calcasieu	Orleans	Tangipahoa
Cameron	Plaquemines	Terrebonne
Concordia	Pointe Coupee	Vermilion
East Baton Rouge	Rapides	Vernon
East Feliciana	St. Bernard	Washington
Evangeline	St. Charles	West Baton Rouge
Iberia	St. Helena	West Feliciana

Southern Louisiana - Offshore

Federal - Offshore

State - Offshore

General - Offshore

New Mexico

New Mexico - Permian Basin Area

Chaves	Eddy	Lea

New Mexico - San Juan Basin Area

McKinley	Rio Arriba	Sandoval
		San Juan

Texas

Texas Railroad Commission District No. 1 (South)

Atascosa	Frio	McMullen
Bastrop	Gonzales	Maverick
Bexar	Guadalupe	Medina
Caldwell	Kinney	Uvalde
Dimmit	Lasalle	Wilson
		Zavala

Texas Railroad Commission District No. 1 (North)

Bandera	Gillespie	Milam
Bell	Hays	Real
Blanco	Kendall	Travis
Burnet	Kerr	Val Verde
Comal	Llano	Williamson
Edwards	Mason	

Texas Railroad Commission District No. 2

Bee	Jackson	Live Oak
Calhoun	Karnes	Refugio
De Witt	Lavaca	Victoria
Goliad		

Texas Railroad Commission District No. 3

Austin	Hardin	Orange
Brazoria	Harris	Polk
Brazos	Jasper	San Jacinto
Burleson	Jefferson	Trinity
Chambers	Lee	Tyler
Colorado	Liberty	Walker
Fayette	Madison	Waller
Ft. Bend	Matagorda	Washington
Galveston	Montgomery	Wharton
Grimes	Newton	

Texas Railroad Commission District No. 4

Arkansas	Jim Hogg	San Patricio
Brooks	Jim Wells	Starr
Cameron	Kenedy	Webb
Duval	Kleberg	Willacy
Hidalgo	Nueces	Zapata

Texas Railroad Commission District No. 5

Bosque	Henderson	Limestone
Collin	Hill	McLennan
Dallas	Hopkins	Nararro
Delta	Hunt	Rains
Ellis	Johnson	Robertson
Falls	Kaufman	Rockwell
Fannin	Lamar	Tarrant
Freestone	Leon	Van Zandt

Texas Railroad Commission District No. 6

Anderson	Harrison	Rusk
Angelina	Houston	Sabine
Bowie	Marion	San Augustine
Camp	Morris	Shelby
Cass	Nacogdoches	Smith
Cherokee	Panola	Titus
Franklin	Red River	Upshur

Gregg		Wood
Texas Railroad Commission District No. 7-B		
Brown	Hamilton	Parker
Callahan	Haskell	San Saba
Coleman	Hood	Shackelford
Comanche	Jones	Somervell
Coryell	Lampasas	Stephens
Eastland	Mills	Stonewall
Erath	Nolan	Taylor
Fisher	Palo Pinto	Throckmorton
Texas Railroad Commission District No. 7-C		
Coke	McCulloch	Sutton
Concho	Menard	Terrell
Crockett	Reagan	Tom Green
Irion	Runnels	Upton
Kimble	Schleicher	
Texas Railroad Commission District No. 8		
Andrews	Howard	Pecos
Brewster	Hudspeth	Presidio
Crane	Jeff Davis	Reeves
Culberson	Loving	Sterline
Ector	Martin	Ward
El Paso	Midland	Winkler
Glasscock	Mitchell	
Texas Railroad Commission District No. 8-A		
Bailey	Floyd	Lamb
Borden	Gaines	Lubbock
Cochran	Garza	Lynn
Cottle	Hale	Motley
Crosby	Hockley	Scurry
Dawson	Kent	Terry
Dickens	King	Yoakum
Texas Railroad Commission District No. 9		
Archer	Foard	Montague
Baylor	Grayson	Wilbarger
Clay	Hardeman	Wichita
Cooke	Jack	Wise
Denton	Knox	Young
Texas Railroad Commission District No. 10		
Armstrong	Gray	Oldham
Briscoe	Hall	Parmer
Carson	Hansford	Potter
Castro	Hartley	Randall
Childress	Hemphill	Roberts
Collingsworth	Hutchinson	Sherman
Dallam	Lipscomb	Swisher
Deaf Smith	Moore	Wheeler
Donley	Ochiltree	
Texas - Offshore		
Federal - Offshore		
State - Offshore		
General - Offshore		

Appendix D

Selected Recurring Natural Gas and Related Reports

Appendix D

Selected Recurring Natural Gas and Related Reports

Reports Dealing Principally with Natural Gas and/or Natural Gas Liquids

- *Natural Gas Annual 1988*, DOE/EIA-0131(88), October 1989. Published Annually.
- *Natural Gas Monthly*, DOE/EIA-0130. Published monthly.
- *Statistics of Interstate Natural Gas Pipeline Companies 1988*, DOE/EIA-0145(88), November 1989. Published annually.

Other Reports Covering Natural Gas, Natural Gas Liquids, and Other Energy Sources

- *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves - 1988 Annual Report*, DOE/EIA-0216(88), September 1989.
- *Monthly Energy Review*, DOE/EIA-0035. Published monthly. Provides national aggregate data for natural gas, natural gas liquids, and other energy sources.
- *Annual Report to Congress 1988*, DOE/EIA-0173(88), January 1989.
- *Annual Energy Outlook 1989*, DOE/EIA-0384(89), January 1989.
- *Annual Energy Review 1988*, DOE/EIA-0384(88), May 1989.
- *Short-Term Energy Outlook*, DOE/EIA-0202. Published quarterly. Provides forecasts for next six quarters for natural gas and other energy sources.
- *International Energy Annual 1987*, DOE/EIA-0219(87), October 1988. Published annually.

Selected Recurring Natural Gas and Related Data Reference Reports

- *Directory of Energy Data Collection Forms*, DOE/EIA-0249(88). February 1989.
- *EIA Publications Directory, A User's Guide 1987*, DOE/EIA-0149(87), March 1988. Published annually.
- *Oil and Gas Field Code Master List 1988*, DOE/EIA-0370(88), December 1988.
- *Energy Information Directory*, DOE/EIA-0205(88/2), August 1988.

Glossary

Annual Requirement: a reporting company's best estimate of its annual requirement for natural gas needed to make direct sales or sales for resale under certificate authorizations and for company use and unaccounted-for gas during the year following the current report year.

Certificate Requirement: the maximum annual volume allowed for sales of natural gas to resale or direct-sale customers under certificate authorization by the FERC. The volume reported should be without regard to FERC-approved curtailment plans.

Coal Gas: substitute natural gas produced synthetically by the chemical reduction of coal at a coal gasification facility.

Dedicated Reserves: as used in this report and defined in Form 15, dedicated reserves are the volume of recoverable, salable gas reserves committed to, controlled by, or possessed by the reporting pipeline company and used for acts and services for which both the seller and the company have received certificate authorization from the FERC. Reserves include both company-owned reserves (including owned gas in underground storage), reserves under contract from independent producers, and short-term and emergency supplies from the intrastate market. Gas volumes under contract from other interstate pipelines are not included as reserves, but may constitute part or all of a company's gas supply.

Deliverability: as used in this report and defined by the FERC in its Order No. 279 (CFR 2.61, 260.7), deliverability "...represents the number of future years during which a pipeline company can meet its annual requirements for its presently certificated delivery capacity from presently committed sources of supply. The availability of gas from these sources of supply shall be governed by the physical capabilities of these sources to deliver gas, by the terms of existing gas-purchase contracts, and by limitations imposed by State or Federal regulatory agencies."

Dry Gas: Natural gas from which the entrained liquids and nonhydrocarbon gases have been removed by lease facilities and/or plant processing. This is the gas that the interstate pipeline purchased, or expects to purchase, to serve its annual requirements.

Gas Supply: For the purpose of this report, the dedicated, recoverable, salable natural gas, including liquefied natural gas (LNG), synthetic natural gas (SNG), and coal gas available to a reporting company from the following:

- company owned reserves
- independent producer contracts
- LNG contracts
- SNG contracts
- gas purchase contracts with other pipeline companies
- commitments with foreign suppliers
- coal gasification contracts
- recoverable gas in underground storage.

Independent Producer: For the purposes of this report, any person who is engaged in the production or gathering of natural gas and who sells natural gas in interstate commerce for resale, but who is not engaged in the transportation of natural gas (other than gathering) by pipeline in interstate commerce.

Interstate Pipeline: Any person engaged in natural gas transportation subject to the jurisdiction of the FERC under the Natural Gas Act.

Interstate Pipeline Purchase: Any gas supply contracted from and volumes purchased from other interstate pipelines, overland natural gas import purchases, and LNG, SNG, or coal gas purchases from domestic or foreign sources. Purchases from intrastate pipelines, pursuant to Section 311(b) of the NGPA of 1978, and from independent producers are not included with interstate pipeline purchases.

Intrastate Pipeline: Any person engaged in natural gas transportation (not including gathering) that is not subject to the jurisdiction of the FERC under the Natural Gas Act (other than any such pipeline which is not subject to the jurisdiction of the FERC solely by reason of Section 1(c) of the Natural Gas Act).

Liquefied Natural Gas (LNG): For this report, natural gas which has undergone a phase change to a liquid state and which, before entry into the pipeline stream, must undergo a phase change reversal to the gaseous state.

Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in natural underground reservoirs at reservoir conditions.

Nonassociated Gas: Natural gas in reservoirs that do not contain significant quantities of crude oil.

Offshore Reserves and Production: Unless otherwise dedicated, reserves and production that are in either State or Federal domains, located seaward of the coastline.

Other Supply Contracts: Any contracted gas supply other than owned reserves, producer contracted reserves, and interstate pipeline purchases that are used for acts and services for which the company has received certificate authorization from the FERC. Purchases from intrastate pipelines pursuant to Section 311(b) of the NGPA of 1978 are included with other supply contracts.

Owned Reserves: Any reserve of natural gas that the reporting company owns as a result of oil and gas leases, fee mineral ownership, royalty reservations, or lease or royalty reservations and assignments committed to services under certificate authorizations by the FERC. Company-owned recoverable natural gas in underground storage is classified as owned reserves.

Pipeline Purchases: Gas supply contracted from and volumes purchased from other natural gas companies as defined by the Natural Gas Act, as amended (52 Stat. 821), excluding independent producers, as defined in Paragraph 154.91(a), Chapter I, Title 18 of the Code of Federal Regulations.

Plant or Gas Processing Plant: A facility designed to achieve the recovery of natural gas liquids from the stream of natural gas, which may or may not have been processed through lease separators and field facilities, and to control the quality of the natural gas to be marketed.

Production: Includes gas produced from pipeline company-owned reserves and gas purchased from independent producers.

Report Year: The calendar year, beginning January 1 and ending December 31.

Reserve Additions: The estimated original, recoverable, salable, and new proved reserves credited to new fields, new reservoirs, new gas purchase contracts, amendments to old gas purchase contracts or purchase of gas reserves in-place that occurred during the report year and had not been previously reported. Reserve additions refer to domestic in-the-ground natural gas reserve additions and do not refer to interstate pipeline purchase agreements, contracts with foreign suppliers, coal gas, SNG, or LNG purchase arrangements.

Reservoir: A porous and permeable underground formation containing an individual and separate accumulation of producible hydrocarbons (oil and/or gas) that is confined by impermeable rock or water barriers and characterized by a single natural pressure system. In most situations, reservoirs are classified as oil reservoirs or gas reservoirs by a regulatory agency. In the absence of regulatory authority classification, the classification is based on the natural occurrence of the hydrocarbons in the reservoir, and classification and names may be determined by the respondent.

Revisions: Any change in earlier reserve estimates, positive or negative, made during the report year as a result of new information, including the enlargement of the proved area (extensions). Revisions for a given report year also include increases associated with improved recovery techniques or equipment, adjustments made for previous errors in production estimates, or changes in one or more facts in volumetric or performance reserve estimates.

Revisions and Additions (Gross Change in Reserves): The difference (plus or minus) between the year-end reserves plus production for a given year and the year-end reserves for the previous year.

Salable-Natural Gas: Natural gas marketed under controlled quality conditions.

Short-Term Sales: Any short-term purchase covering a time period of 2 years or less. Purchases from intrastate pipelines pursuant to Section 311(b) of the NGPA of 1978 are classified as short-term sales, regardless of the stated contract term.

Supplemental Gaseous Fuel Supplies: As used in this report supplemental supplies include coal gas, LNG, SNG, and any other supply not explicitly type-identified in the Form 15 filings.

Supply Source: May be a single completion, a single well, a single field with one or more reservoirs, several fields under a single gas purchase contract, miscellaneous fields, a processing plant, or a field area, providing, however, that the geographic area encompassed by a single supply source may not be larger than the State in which the reserves are reported.

Synthetic Natural Gas (SNG): A product resulting from the manufacture, conversion, or reformation of petroleum hydrocarbons that may easily be substituted for or interchanged with pipeline-quality natural gas.

Underground Storage: Any underground facility where natural gas is stored within the confines of naturally occurring earth formations and where natural gas is injected with the intent of future withdrawal and use. Abandoned mines or caverns in salt domes in which natural gas is stored underground are considered to be underground storage facilities.

Undifferentiated/Unspecified Reserves and Production: Reserves and production that are not separable by FERC production areas or by States. Undifferentiated and unspecified reserves consist only of company-owned gas in underground storage commencing with report year 1981.

Warranty Contracts: Gas purchase agreements for the sale of natural gas by a producer to a pipeline company wherein the producer warrants it will have available sufficient gas supplies to meet its commitments over the life of the contract. Generally, the producer does not dedicate gas reserves underlying any specific acreage, lease, or fields to the agreement. Substitution of various sources of gas supply may be permitted according to the terms of the contract.

Information

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